



## PRODUCT CATALOGUE



2024

Since over 30 years SIPMA S.A. successfully offers rich variety of agricultural machines on the domestic and foreign market.

We produce agricultural equipment of the best quality, paying special attention to the situation on the market, as well as to individual needs of our clients.

We specialize ourselves in producing balers and bale wrapping machines, still developing our offer in new products of SIPMA.

Choose products of SIPMA and choose quality!

## The Mission of SIPMA

*To reach excellence in everything we do,  
with creativity and professionalism at work,  
preserving our basic values,  
caring for our customers  
and employees alike,  
and facilitating personal development.*

**Leszek Kępa**  
President of SIPMA S.A.



Modern constantly supervised production process and experienced technical staff is a guarantee of high quality products offered by SIPMA S.A. Products are subjected to detailed testing and conformity assessment in the Research and Development Center and the safety of their use testifies CE mark.

 2 DISC MOWERS	 10 TEDDERS	 16 RAKES
 24 VARIABLE CHAMBER ROUND BALER	 28 FIXED CHAMBER ROUND BALERS	 46 CUBE BALER
 50 ENSILAGE BALER	 54 BALE WRAPPERS	 78 SELF-LOADING STACKING TRAILER
 80 BALE SHREDDERS	 85 MINERAL FERTILIZER DISTRIBUTORS	 96 MANURE SPREADERS
 104 GRAIN CRUSHERS	 108 TRAILED FORAGE HARVESTER FOR ENERGY CROPS	 112 PTO SHAFTS
 116 ORIGINAL SPARE PARTS	 117 GRUPA SIPMA SIPMA GROUP	 120 SIPMA CONTACT DETAILS

## DISC MOWERS

SIPMA KD 2510 KOS

SIPMA KD 2910 KOS

SIPMA KD 2620 SPRINT

NEW PRODUCT

SIPMA KD 3020 SPRINT

NEW PRODUCT

SIPMA KD 3025 SPRINT

NEW PRODUCT

SIPMA disc mowers with side and central suspension are machines with modern design, solid frames and proven functionality. They are used to mow all kinds of green crops dedicated to direct feeding, for hay or for ensiling (haylage).

### SIPMA KD 2510 KOS

### SIPMA KD 2910 KOS



PTO SHAFT



SIPMA KD 2910 KOS

SIPMA KD 2510 KOS and SIPMA KD 2910 KOS are rear-hitched disc mowers with side-suspension. They are modern, lightweight and simple design machines.

#### Welded frame from closed and bent metal profiles

is lightweight and guarantees high durability. It facilitates easy hitching of the disc mower to the three-point linkage of the tractor, with high comfort and efficiency of work.

#### Mower bar side suspension

is simple, but makes the mower perfectly follow the terrain with equal pressure on the ground.

#### Safety spring fuse

allow for tilting the mower bar backwards when running into an obstacle, which protects the machine components from damage.

#### SIPMA PTO shaft

with one-way clutch ensures smooth stopping of the machine rotating parts and protects the disc drives from damage.

#### Mouldboards fitted behind the mower bar

enable adjusting the forage width for the devices used in the further stages of harvesting.

#### Quick knife replacement system

enables quick and convenient replacement of knives, at the same time reducing service time to minimum.

#### Front and rear openable covers

facilitate servicing of the machine.

#### Disc mower design

enables transporting them vertically on the tractor side.

#### Relief spring system

with adjustment gear assures optimum pressure of the mowing bar on the ground.

#### Wide mowing range of cutting bar

(from -12° to +24°) enables work on wavy and mountain fields.

#### Hydraulic actuator

allows lifting the disc mower to its transport position and when u-turning at the headland.

#### Mowing height adjustment system

operated with the upper link of the tractor three point linkage helps setting the proper mowing height.



SIPMA KD 2620 SPRINT

NEW PRODUCT

SIPMA KD 3020 SPRINT

NEW PRODUCT



SIPMA KD 2620 SPRINT

SIPMA KD 2620 SPRINT and SIPMA KD 3020 SPRINT are rear-hitched disc mowers with side-suspension. They are modern, lightweight and simple design machines.

#### **Welded frame from closed and bent metal profiles**

is lightweight and guarantees high durability. It facilitates easy hitching of the disc mower to the three-point linkage of the tractor, with high comfort and efficiency of work.

#### **Mower bar side suspension**

is simple, but makes the mower perfectly follow the terrain with equal pressure on the ground.

#### **Modern SIPMA mower cutterbar**

with quick knife replacement system in standard that allows shortening service time to minimum.

#### **Safety spring fuse**

allow for tilting the mower bar backwards when running into an obstacle, which protects the machine components from damage.

#### **SIPMA PTO shaft**

with one-way clutch ensures smooth stopping of the machine rotating parts and protects the disc drives from damage.

#### **Mouldboards fitted behind the mower bar**

enable adjusting the forage width for the devices used in the further stages of harvesting.

#### **Quick knife replacement system**

enables quick and convenient replacement of knives, at the same time reducing service time to minimum.

#### **Front and rear openable covers**

facilitate servicing of the machine.

#### **Disc mower design**

enables transporting them vertically on the tractor side.

#### **Relief spring system**

with adjustment gear assures optimum pressure of the mowing bar on the ground.

#### **Wide mowing range of cutting bar**

(from  $-12^{\circ}$  to  $+24^{\circ}$ ) enables work on wavy and mountain fields.

#### **Hydraulic actuator**

allows lifting the disc mower to its transport position and when u-turning at the headland.

#### **Mowing height adjustment system**

operated with the upper link of the tractor three point linkage helps setting the proper mowing height.



## SIPMA KD 3025 SPRINT

NEW PRODUCT



SIPMA KD 3025 SPRINT rear-hitched disc mower with central suspension guarantee perfect ground copying and equal cutting height across the entire width of the cutterbar.

### **Welded frame from closed and bent metal profiles**

is lightweight and guarantees high durability. It facilitates easy hitching of the disc mower to the three-point linkage of the tractor, with high comfort and efficiency of work.

### **Mower bar central suspension**

guarantee perfect terrain copying along with even pressure, which ensures an equal cutting height across the entire width of cutterbar.

### **Modern SIPMA mower cutterbar**

with quick knife replacement system in standard that allows shortening service time to minimum.

### **Mouldboards fitted behind the mower bar**

enable adjusting the forage width for the devices used in the further stages of harvesting.

### **SIPMA PTO shaft**

equipped with one-way friction clutch ensures smooth stopping of the machine rotating parts and protects the disc drives from damage.

### **Hydraulic collision protection system**

allow for tilting the mower bar backwards and lifting it up when running into an obstacle, which protects the machine components from damage.

### **Front and rear openable covers**

facilitate servicing of the machine.

### **The design of the mower allows it to be transported in three positions:**

- vertically to the side of the tractor;
- vertically at the rear of the tractor;
- horizontally at the rear of the tractor.

### **Relief spring system**

with adjustment gear assures optimum pressure of the mowing bar on the ground.

### **Wide mowing range of cutting bar**

(from  $-12^{\circ}$  to  $+24^{\circ}$ ) enables work on wavy and mountain fields.

### **Hydraulic actuator**

allows lifting the disc mower to its transport position and when u-turning at the headland.

### **Mowing height adjustment system**

operated with the upper link of the tractor three point linkage helps setting the proper mowing height.



MODEL		KD 2510 KOS	KD 2910 KOS
Suspension type		side	side
Mowing width	m	2,40	2,85
Mowing height			
minimum	mm	43	43
maximum	mm	73	73
Number of discs	pcs.	6	7
Number of cutting knives	pcs.	12	14
PTO rotation speed	rpm	540	540
Disc rotation speed	rpm	2980	2980
Working speed	km/h	≤15	≤15
Work efficiency	ha/h	≤2,5	≤2,9
Power demand	kW (HP)	45 (61)	65 (88)
Equipment			
PTO shaft		●	●
Dimensions in working position			
length	mm	4070	4490
width	mm	1630	1630
height	mm	970	970
Weight	kg	500	520

KD 2620 SPRINT	KD 3020 SPRINT	KD 3025 SPRINT
side	side	central
2,52	2,95	3,0
Mowing height		
43	43	45
73	73	76
6	7	6
12	14	12
540	540	540
3150	3150	2750
≤15	≤15	≤15
≤2,6	≤3	≤3,5
45 (61)	50 (68)	60 (82)
Equipment		
●	●	●
Dimensions in working position		
4550	4990	4850
1330	1330	1750
1160	1160	1450
600	640	1000

● – standard, ○ – additional equipment, × – unavailable

# SIPMA

## TEDDERS

SIPMA PT 520 SALSA

SIPMA PT 525 SALSA

NEW PRODUCT

SIPMA PT 670 SALSA

SIPMA PT 675 SALSA

NEW PRODUCT

Tedders are machines that support the process of drying hay by tedding the freshly cut, short-stemmed green plants. The advantage of these machines is gentle and uniform spreading of the mown swath, which facilitates aeration and significantly speeds up drying. In our offer you can find mounted and trailed tedders.

SIPMA PT 520 SALSA

SIPMA PT 670 SALSA



SIPMA PT 520 SALSA



included in price  
PTO SHAFT

SIPMA PT 520 SALSA and SIPMA PT 670 SALSA mounted tedders are characterized by high efficiency. Machines guarantee optimal and equal spread of mowed material.

### Support frame

has a compact and robust design with low weight.

### Gears

are made of high-strength materials. Their working parts are submerged in an oil bath, which guarantees a long service life of the machine.

### Rotors

with optimal diameter and number of arms, ensure smooth, consistent operation of the machine and low power requirements.

### The hydraulic system

the tedder is equipped with (a pair of single-acting hydraulic cylinders), enables folding and unfolding of the machine for transport or working position. After folding machine to transport position, hydraulic cylinders are blocked automatically, what secure them against accidental unfold.

### Spread angle

obtained by adjusting the angle of inclination of the rotors, enables adjusting the machine to the material arranged in various thicknesses swaths.

### Tedding tines

with a diameter  $\varphi = 10$  mm, are made of high-quality spring steel.

### Tine loss protections

prevent from loss of tines when they crack.

### Wheels

thanks to using the optimal sizes of tires they provides low rolling friction during operation, even in harsh field conditions. The use of additional guards provides adequate protection against material winding around machine wheels, enabling smooth operation even with troublesome material.

### Swivel wheels

facilitate work at the edge of the field and prevent the material from being thrown outside the working range.

### Feeler wheel

provides excellent terrain copying in difficult working conditions. Works great on uneven surfaces - minimizes the contact with ground, maintaining longer service life and ensuring the purity of teded material.



SIPMA PT 525 SALSAL **NEW PRODUCT**

SIPMA PT 675 SALSAL **NEW PRODUCT**



SIPMA PT 675 SALSAL

Trailed tedders SIPMA PT 525 SALSAL and SIPMA PT 675 SALSAL are characterized by high efficiency. Machines guarantee optimal and equal spread of mowed material. Dedicated to work at small and medium farm with tractors with low power and low lifting capacity. Lowering the chassis to transport position is done by hydraulic cylinder.

### Support frame

has a compact and robust design, which is perfect for intensive and hard work.

### Gears

are made of high-strength materials. Their working parts are submerged in an oil bath, which guarantees a long service life of the machine.



GEAR

### Rotors

with optimal diameter and number of arms, ensure smooth, consistent operation of the machine and low power requirements.

### The hydraulic system

the tedder is equipped with (chassis actuator and a pair of single-acting hydraulic cylinders), enables folding and unfolding the machine to set it to the transport or working position. After folding machine to transport position, hydraulic cylinders are blocked automatically, what secure them against accidental unfold.

### Spread angle

obtained by adjusting the angle of inclination of the rotors, enables adjusting the machine to the material arranged in various thicknesses swaths.

### Tedding tines

with a diameter  $\varphi = 10$  mm, are made of high-quality spring steel.



TEDDING TINES

### Tine loss protections

prevent from loss of tines when they crack.

### Wheels

thanks to using the optimal sizes of tires they provides low rolling friction during operation, even in harsh field conditions. The use of additional guards provides adequate protection against material winding around machine wheels, enabling smooth operation even with troublesome material.

### Swivel wheels

facilitate work at the edge of the field and prevent the material from being thrown outside the working range.

### Feeler wheel

provides excellent terrain copying in difficult working conditions. Works great on uneven surfaces - minimizes the contact with ground, maintaining longer service life and ensuring the purity of teded material.



MODEL		PT 520 SALSA
Aggregation method		mounted
Working width	mm	5200
Number of rotors	pcs.	4
Number of rotor arms	pcs.	6
Diameter of rotor	mm	1200 / 1600
Rotor wheels size		16 x 6.5 - 8
Running gear wheels size		×
PTO rotation speed	rpm	540
Power demand	kW (HP)	32 (44)
Equipment		
PTO shaft		●
tine loss protections		●
feeler wheel		●
axle cover		●
Dimensions in working position		
length	mm	2150
width	mm	5450
height	mm	1710
Dimensions in transport position		
length	mm	2150
width	mm	3000
height	mm	2570
Weight	kg	600

● – standard, ○ – additional equipment, × – unavailable

PT 525 SALSA	PT 670 SALSA	PT 675 SALSA
trailed	mounted	trailed
5200	6700	6700
4	6	6
6	6	6
1200 / 1600	1200 / 1600	1200 / 1600
16 x 6.5 - 8	16 x 6.5 - 8	16 x 6.5 - 8
23 x 5 - 6	×	23 x 5 - 6
540	540	540
30 (40.8)	44 (60)	42 (57)
Equipment		
●	●	●
●	●	●
●	●	●
●	●	●
Dimensions in working position		
3100	2150	3050
5450	7880	7880
2910	1700	2750
Dimensions in transport position		
3900	2150	3900
3130	3000	3130
2900	3800	4100
840	770	1020

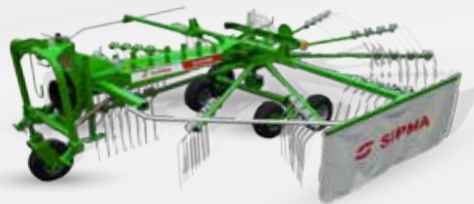
## RAKES

SIPMA ZK 350 WIR  
 SIPMA ZK 450 WIR  
 SIPMA ZK 455 WIR  
 SIPMA ZK 650 WIR  
 SIPMA ZK 720 SPINNER

NEW PRODUCT

Raking swaths is a very important element of the entire process of harvesting and conservation of green forage. Using rakes ensures obtaining a suitable quality of forage, does not damage fragile parts of grass, does not decrease their nutritional value and it significantly influences the efficiency and quality of working with the next machines in the technological line - round balers.

### SIPMA ZK 350 WIR SIPMA ZK 450 WIR



SIPMA ZK 450 WIR

SIPMA ZK 350 WIR and SIPMA ZK 450 WIR rakes are designed to rake green fodder, dried green fodder, hay and straw.

#### Welded body

with articulated fitting of the front frame allows mounting the rake on the tractor three-point linkage and ensures comfortable operation and excellent tracking of the terrain.

#### Oil transmission

ensures long-lasting and reliable operation.

#### Raking arms

with three double tines (SIPMA ZK 350 WIR) or four double tines (SIPMA ZK 450 WIR) ensure efficient raking of forage as well as uniform and permeable swaths.

#### Tine loss protections (additional equipment)

prevent from loss of tines when they crack.

#### Adjustable screen

allows to set the appropriate width of the formed swaths.

#### Easily accessible crank

enables the stepless adjustment of the height of the raking tines from the ground.

#### Wide tires

ensures easy and comfortable work.

#### Transport position

facilitates comfortable transport and storage of the rake. Readjustment of the rake into the transport position (without the need of using any tools) is possible due to foldable raking arms and lifted safety guards.

#### Tandem-type chassis

prevents contamination of the forage with soil and quick wear of the tines as well as ensures accurate raking of the material. This solution is especially recommended in fields with local inequalities.

#### Additional height adjustment

(SIPMA ZK 450 WIR) of the tandem-type chassis allows more accurate set up of the rake's operation height.

#### Feeler wheel

(SIPMA ZK 450 WIR) ensures the best mapping of the area, pure raking in difficult work conditions and it improves driving of the machine. It's perfect for irregular surfaces - tines of rake don't have any contact with the ground, they less wear and tear and they maintain a longer life.



## SIPMA ZK 455 WIR



The SIPMA ZK 455 WIR trailed rake is designed for raking green forage, dried green forage, straw and hay. Designed to work at small and medium-sized farms. Characterized by a low power requirement. Lifting for transport is done hydraulically by hydraulic cylinders mounted on the drawbar and chassis.

### Oil transmission

ensures long-lasting and reliable operation.

### Wide tires

ensures easy and comfortable work.

### Transport position

facilitates comfortable transport and storage of the rake. Readjustment of the rake into the transport position (without the need of using any tools) is possible due to foldable raking arms and lifted safety guards.

### Raking arms

with four double tines ensure efficient raking of forage as well as uniform and permeable swaths.

### Adjustable screen

allows to set the appropriate width of the formed swaths.

### Feeler wheel

ensures the best mapping of the area, pure raking in difficult work conditions and it improves driving of the machine. It's perfect for irregular surfaces - tines of rake don't have any contact with the ground, they less wear and tear and they maintain a longer life.

## SIPMA ZK 650 WIR



Rake SIPMA ZK 650 WIR is designed to rake the green fodder, dried green fodder, straw and hay. It has two rotors with inside layering of the forage.

### Working width

is adjusted hydraulically from 6.5 to 7.2 m and allows for setting the desired width of swaths.

### Easily accessible crank

enables the stepless adjustment of the height of the raking tines from the ground.

### Welded body

with articulated fitting of the front frame allows mounting the rake on the tractor three-point linkage and ensures comfortable operation and excellent tracking of the terrain.

### Raking arms

2 x 11 pieces with 3 double raking fingers each, ensure effective raking and even arrangement and airy swaths.

### Tine loss protections (additional equipment)

prevent from loss of tines when they crack.

### 4-wheel chassis

with front rotational wheels ensure smooth running and exact tracking of the terrain.

### Rear twist-beam axis

connected by a tie rod with the articulated front frame ensures comfortable operation at headlands.

### Hydraulic rake folding

into the transport position, up to the width of 2.4m and height lower than 4 m facilitates transport on public roads.

### Three-dimensional terrain tracking

allows for very clean collection of the raked material.

## SIPMA ZK 720 SPINNER

NEW PRODUCT



SIPMA ZK 720 SPINNER rake is equipped with two rotors with swath deposition on the side of the machine is intended to rake green forage, dried green forage, straw and hay. Construction of rakes enables to form one or two swaths.

### Working width

6.5 m in case of single swath disposal or 7.2 m in case of two swath disposal, with hydraulic adjusting of rotors.

### Support frame

from closed and bent metal profiles ensures high durability and reliability during everyday exploitation. Along with front frame enable mounting rakes on tractor three-point linkage and ensure unparalleled working comfort and perfect ground following.

### Raking arms

2 x 11 pieces with 4 double raking fingers each, ensure effective raking of the swath and the arrangement of flat surfaces and airy swaths.

### 4-wheel chassis

with front rotational wheels ensure smooth running and exact tracking of the terrain.

### Easily accessible crank

enables the stepless adjustment of the height of the raking tines from the ground.

### Hydraulic raking height adjustment (additional equipment)

allows to adjust the height of the raking tines without leaving the tractor.

### 3D ground following

ensures really clean collection of raked material.

### Rear steering axle

connected by rods to the articulated front frame, it ensures comfortable work at headlands.

### Spring-based rotors support

enables to set optimal pressure of rotors to the ground.

### Oil transmission

ensures long-lasting and reliable operation.

### Hydraulic rake folding

into the transport position, up to the width of 2.83 m and height of 4 m facilitates transport on public roads without necessity to dismantling raking arms.

### Tine loss protections

prevent from loss of tines when they crack.



RAKING ARMS

MODEL		ZK 350 WIR	ZK 450 WIR
Aggregation method		mounted	mounted
Working width	mm	3500	4500
Raking bank width	mm	600 - 1400	800 - 1600
Number of rotors	pcs.	1	1
Diameter of rotors	mm	2625	3500
Number of raking arms	pcs.	9	11
Number of tines on raking arm	pcs.	3	4
Wheel size		×	×
Rake set wheel size		15 x 6.00 - 6	15 x 6.00 - 6
Maximum speed	km/h	10	10
Power demand	kW (HP)	25.5 (35)	25.5 (35)
Equipment			
PTO shaft		●	●
tandem-type chassis		●	●
feeler wheel		×	●
tine loss protections		○	○
Dimensions in working position			
length	mm	3210	4200
width	mm	3500	4500
height	mm	1110	1200
Dimensions in transport position			
length	mm	3210	4200
width	mm	1370	1620
height without rakes	mm	1200	1280
height with rakes	mm	1750	2200
Weight	kg	397	530

● – standard, ○ – additional equipment, × – unavailable

ZK 455 WIR	ZK 650 WIR	ZK 720 SPINNER
trailed	trailed	trailed
4500	6500 - 7200	6500 - 7200
800 - 1600	800 - 1800	800 - 1500
1	2	2
3500	2950	3160
11	11	11
4	3	4
16 x 6.50 - 8	11.5 / 80 - 15.3	11.5 / 80 - 15.3
16 x 6.50 - 8	15 x 6.00 - 6	15 x 6.00 - 6
10	10	10
22 (30)	50 (68)	52 (70)
Equipment		
●	●	●
●	●	●
●	×	×
○	○	●
Dimensions in working position		
5220	4800	7990
4500	6950 - 7650	6500 - 7400
1110	1400	2540
Dimensions in transport position		
3990	4800	7990
1730	2400	2830
1680	3280	3150
2640	4000	4000
650	1500	2150



## VARIABLE CHAMBER ROUND BALER

SIPMA PZ 2780 SUPRA **NEW PRODUCT**



PTO SHAFT



**OptiFlow**  
System

The new generation SIPMA PZ 2780 SUPRA Series 2000 variable chamber baler is designed for harvesting straw, hay and green fodder for haylage.

### Variable chamber

based on five seamless belts to form bales from 0.9 to 1.8 m in diameter.

### New, reliable camless pick-up

2.2 m wide with pressure roller and pneumatic wheels.

### New high-performance feeding and shredding unit

with tilting floor system, equipped with 15 knives, each with individual mechanical protection ensures that the material flows fast and efficiently to the baling chamber. The preset cutting length of 75 mm makes the material perfect for forming properly compacted green fodder bales. Cutting of the collected material makes the bales heavier than bales rolled without cutting, which improves the material handling.



FEEDING AND SHREDDING UNIT

### The pick-up drive

is equipped with a semi-automatic clutch for overload protection and the highest safety requirements.

### Mechanical baling chamber lock

enables a higher pressing grade which improves efficiency and quality of the pressed material.

### Reinforced drive

thanks to the increased strength of the main gearbox, the use of spherical roller bearings at key nodes and reinforced bearings on the belt guide rollers, the use of reinforced chains from renowned manufacturers.

### OptiFlow System

ensures smooth and even feeding of the material from the pick-up through the chopper to the bale chamber with maximum throughput. This achieves maximum feeding speed and minimises the possibility of the machine becoming clogged. The OptiFlow System enables a maximum degree of crushing and a short bale formation time, ensuring more efficient and economical machine operation.

### Rotor tilt bottom system

To push the material into the baling chamber, the rotor tilt bottom simply needs to be lowered with the cab computer panel, the PTO started and then the rotor bottom returned to its original position.

### New, reliable chain lubrication system

based on a mechanical pump with the possibility of setting an individual oil dose for each chain. It reduces the service time and increases life of driver components. Large oil tank capacity minimizes the time of daily machine servicing.

### Pressing roller

helps to maintain an even feeding of the picked up material and ensures its initial pressing.

### Tool-free adjustment of the pick-up's support wheels

allows you to quickly and easily adjust its working height, adapting it easily to changing terrain conditions and swath density.

### Individual knife protection

protects the chopper from stones or other elements that could damage it. It also increases the life of the machine.

### Modernised net wrapper

taking into account customer feedback, providing better net feeding and guaranteeing correctly wrapped bales.

### Net loading and replacement

in the net binder, located at the rear of the baler, is done from ground level, without the need to climb onto the machine.

### Grouped bearing lubrication points

reduce the service time, extend the life of the bearings and increase the comfort of machine operation.

### Longer drawbar

with the option of fitting it with 40mm or 50mm diameter hitching eyes and a K80 ball and equipped with a shaft support to ensure its stability when the machine is uncoupled from the tractor.

### Modern LED road lighting

for even greater safety on the road after dark.

### Wide angle PTO shaft with automatic clutch

ensures possibility of working with the machine at turns and protects the machine against overload damage.

### New electronic control system

that monitors the entire bale cycle including automatic net wrapping, with the possibility of defining all the machine parameters, such as the degree of crushing for the three layers of the bale, the bale diameter, the number of net wraps and control of the evenness of the chamber filling.



ELECTRONIC CONTROLLER

### Functions of the electronic controller:

- activation and carrying out an automatic cycle of the machine operation;
- defining the number of binds of a bale with a net;
- control of equal spread of material in the chamber;
- defining a bale diameter and the degree of its compression in three variants:
  - 1) the core of a bale and its top surface under constant pressure;
  - 2) separate setting of pressure for the core of a bale and its external surface;
  - 3) separate setting of pressure of a bale core, external surface and additional increased pressure during the final formation of a bale;
- supervision and sensor status display;
- indication of the number of bales made, working time, efficiency.

MODEL		PZ 2780 SUPRA
Pick-up width	mm	2200
Chamber type		belt
Bale dimensions		
width	mm	1200
diameter	mm	900 - 1800
Maximum number of cutting knives	pcs.	15
Knives protection		mechanical
Knives operation		hydraulic
Unlocking system		moving floor
Feeler wheels		pneumatic
PTO rotation speed	rpm	540
Power demand		
without shredding	kW (KM)	60 (82)
with shredding	kW (KM)	75 (102)
Equipment		
PTO shaft with automatic clutch		●
pressing roller		●
twine binder		×
net binder		●
shredder		●
electronic control		●
automatic lubrication of chains		●
grouped bearing lubrication points		●
pneumatic brakes		○
hydraulic brakes		○
wide tyres 500 / 50 - 17 18PR		●
Dimensions		
length	mm	5020
working width	mm	2800
transport width	mm	2730
height	mm	3050
Weight	kg	3550

● – standard, ○ – additional equipment, × – unavailable

## FIXED CHAMBER ROUND BALERS

SIPMA PS 1210 CLASSIC

SIPMA PS 1211 FARMA PLUS

SIPMA PS 1221 FARMA PLUS

SIPMA PS 1225 FORTIS

NEW PRODUCT

SIPMA PS 2320 FORTIS PRO

NEW PRODUCT

SIPMA PS 2520 KRONOS

NEW PRODUCT

### SIPMA PS 1210 CLASSIC



Fixed chamber round baler SIPMA PS 1210 CLASSIC is an easy to use and inexpensive machine which guarantee long and reliable operation.

#### Chain type baling chamber

with a hydraulic lock ensures an optimum bale mass for hay, straw and the green fodder for hay silage.

#### Wide range of additional equipment

allows to customize the machine to own needs.

#### Press covers made from laminate

protects mobile elements of the machine and make it look dynamic and modern.

#### Electronic control (additional equipment)

supervises the proper operation of the machine and monitors the process of material collecting and bale forming.



ELECTRONIC CONTROLLER

#### Functions of the electronic controller:

- visualization of the currently performed operation;
- supervision over the bale forming process;
- diagnostics of sensors and electro-coupling;
- counting the number of wrapped bales and working time.

#### Coupling device (additional equipment)

enables connecting it with bale wrappers SIPMA OS 7531 MAJA or SIPMA OS 7650 GAJA, thanks to this feature we obtain a bale wrapped in foil in one pass, while saving time and money.



COUPLING DEVICE



## SIPMA PS 1211 FARMA PLUS



These round balers are well-equipped machines for more demanding customers. The balers are designed especially for those farmers who want high-quality hay silage, but they also perform as well for harvesting hay and straw.

### Chain type baling chamber

ensures the proper pressing of the material without fear of stopping the bale rotation. It allows you to roll any material, regardless of the conditions and the required compression ratio.

### Mechanical baling chamber lock

enables a higher pressing grade which improves efficiency and quality of the pressed material.

### Press covers made from laminate

protects mobile elements of the machine and make it look dynamic and modern.

### Electronic control

supervises the proper operation of the machine and monitors the process of material collecting and bale forming.



ELECTRONIC CONTROLLER

### Functions of the electronic controller:

- visualization of the currently performed operation;
- supervision over the bale forming process;
- diagnostics of sensors and electro-coupling;
- counting the number of wrapped bales and working time.

### Automatic chain lubrication

reduces the service time and increases life of driver components.

### Coupling device (additional equipment)

enables connecting it with bale wrappers SIPMA OS 7531 MAJA or SIPMA OS 7650 GAJA, thanks to this feature we obtain a bale wrapped in foil in one pass, while saving time and money.



## SIPMA PS 1221 FARMA PLUS



SIPMA PS 1221 FARMA PLUS fixed chamber round balers are well-equipped machines for more demanding customers. The balers are designed especially for those farmers who want high-quality hay silage, but they also perform as well for harvesting hay and straw.

### **Innovative, roll-chain type baling chamber**

increases additionally the ratio of bale compression, improving quality of haylage and work efficiency.

### **Mechanical baling chamber lock**

enables a higher pressing ratio which improves efficiency and quality of the pressed material.

### **Press covers made from laminate**

protects mobile elements of the machine and make it look dynamic and modern.

### **Automatic chain lubrication**

reduces the service time and increases life of driver components.

### **Coupling device (additional equipment)**

enables connecting it with bale wrappers SIPMA OS 7531 MAJA or SIPMA OS 7650 GAJA, thanks to this feature we obtain a bale wrapped in foil in one pass, while saving time and money.

### **Electronic control**

supervises the proper operation of the machine and monitors the process of material collecting and bale forming.



ELECTRONIC CONTROLLER

### **Functions of the electronic controller:**

- visualization of the currently performed operation;
- supervision over the bale forming process;
- diagnostics of sensors and electro-coupling;
- counting the number of done bales and working time.



## SIPMA PS 1225 FORTIS

NEW PRODUCT



Fixed chamber round baler SIPMA PS 1225 FORTIS is loaded with features, which meets the expectations of the most demanding customers.

### Innovative, roll-chain type baler chamber

increases additionally the degree of bale compression, improving quality of haylage and work efficiency.

### Mechanical baling chamber lock

enables a higher pressing grade which improves efficiency and quality of the pressed material.

### Rotor

ensures fast and efficient flow of material into the pressing chamber.

### Pickup

(2,05 m wide) ensures correct pick-up of wide windrow, even when making sharp turns, while the side worm conveyors ensure the flow of material into the channel of the rotor unit.

### Shredder (additional equipment)

features 11 shredding knives, ensures that the material flows fast and efficiently to the baling chamber. The preset cutting length of 90 mm makes the material perfect for forming properly compacted green fodder bales. Cutting of the collected material makes the bales 20% heavier than bales rolled without cutting, which improves the material handling.

### Automatic chain lubrication

reduces the service time and increases life of driver components.

### Wide angle PTO shaft with automatic clutch

ensures possibility of working with the machine at turns and protects the machine against overload damage.

### Net binder

protects the bale from loosening, significantly shortens the wrapping time and increases efficiency.

### Pressing roller

helps to maintain an even feeding of the picked up material and ensures its initial pressing.

### Grouped bearing lubrication points

reduce the service time, extend the life of the bearings and increase the comfort of machine operation.

### Coupling device (additional equipment)

enables connecting it with bale wrappers SIPMA OS 7531 MAJA or SIPMA OS 7650 GAJA, thanks to this feature we obtain a bale wrapped in foil in one pass, while saving time and money.

### Electronic control

supervises the proper operation of the machine and monitors the process of material collecting and bale forming.



ELECTRONIC CONTROLLER

### Functions of the electronic controller:

- supervision and sensor status display;
- indication of the number of bales made, working time and efficiency;
- control of equal spread of material in the chamber;
- defining and control of compression ratio;
- activation and carrying out an automatic cycle of the machine operation.



## SIPMA PS 2320 FORTIS PRO

NEW PRODUCT



The new generation SIPMA PS 2320 FORTIS PRO from the 2000 Series is a well-equipped model of fixed chamber baler, meeting the expectations of the most demanding customers.

### **Innovative, roll-chain type baler chamber**

increases additionally the degree of bale compression, improving quality of haylage and work efficiency.

### **New, reliable camless pick-up**

2.2 m wide with pressure roller and pneumatic wheels.

### **New high-performance feeding and shredding unit**

with tilting floor system, equipped with 15 knives, each with individual mechanical protection ensures that the material flows fast and efficiently to the baling chamber. The preset cutting length of 75 mm makes the material perfect for forming properly compacted green fodder bales. Cutting of the collected material makes the bales heavier than bales rolled without cutting, which improves the material handling.

### **The pick-up drive**

is equipped with a semi-automatic clutch for overload protection and the highest safety requirements.

### **Mechanical baling chamber lock**

enables a higher pressing grade which improves efficiency and quality of the pressed material.

### **OptiFlow System**

ensures smooth and even feeding of the material from the pick-up through the chopper to the bale chamber with maximum throughput. This achieves maximum feeding speed and minimises the possibility of the machine becoming clogged. The OptiFlow System enables a maximum degree of crushing and a short bale formation time, ensuring more efficient and economical machine operation.

### **Rotor tilt bottom system**

To push the material into the baling chamber, the rotor tilt bottom simply needs to be lowered with the cab computer panel, the PTO started and then the rotor bottom returned to its original position.

### **New, reliable chain lubrication system**

based on a mechanical pump with the possibility of setting an individual oil dose for each chain. It reduces the service time and increases life of driver components. Large oil tank capacity minimizes the time of daily machine servicing.

### **Pressing roller**

helps to maintain an even feeding of the picked up material and ensures its initial pressing.

### **Tool-free adjustment of the pick-up's support wheels**

allows you to quickly and easily adjust its working height, adapting it easily to changing terrain conditions and swath density.

### **Individual knife protection**

protects the chopper from stones or other elements that could damage it. It also increases the life of the machine.



### **Net binder**

protects the bale from loosening, significantly shortens the wrapping time and increases efficiency.

### **Grouped bearing lubrication points**

reduce the service time, extend the life of the bearings and increase the comfort of machine operation.

### **Modern LED road lighting**

for even greater safety on the road after dark.

### **Wide angle PTO shaft with automatic clutch**

ensures possibility of working with the machine at turns and protects the machine against overload damage.

### **Electronic control**

supervises the proper operation of the machine and monitors the process of material collecting and bale forming.



ELECTRONIC CONTROLLER

### **Functions of the electronic controller:**

- supervision and sensor status display;
- indication of the number of bales made, working time and efficiency;
- control of equal spread of material in the chamber;
- defining and control of compression ratio;
- activation and carrying out an automatic cycle of the machine operation.



## SIPMA PS 2520 KRONOS

NEW PRODUCT



The new generation SIPMA PS 2520 KRONOS Series 2000 baler is designed for harvesting green fodder for haylage. It is also ideal for harvesting straw and hay.

### Roll type baling chamber

(1,20 x 1,25 m) build of 17 durable ribbed rollers, which ensure a high degree of compression and rotation of the bale in the chamber, regardless of the prevailing conditions.

### New, reliable camless pick-up

2.2 m wide with pressure roller and pneumatic wheels.

### New high-performance feeding and shredding unit

with tilting floor system, equipped with 15 knives, each with individual mechanical protection ensures that the material flows fast and efficiently to the baling chamber. The preset cutting length of 75 mm makes the material perfect for forming properly compacted green fodder bales. Cutting of the collected material makes the bales heavier than bales rolled without cutting, which improves the material handling.

### The pick-up drive

is equipped with a semi-automatic clutch for overload protection and the highest safety requirements.

### Mechanical baling chamber lock

enables a higher pressing grade which improves efficiency and quality of the pressed material.

### OptiFlow System

ensures smooth and even feeding of the material from the pick-up through the chopper to the bale chamber with maximum throughput. This achieves maximum feeding speed and minimises the possibility of the machine becoming clogged. The OptiFlow System enables a maximum degree of crushing and a short bale formation time, ensuring more efficient and economical machine operation.

### Rotor tilt bottom system

To push the material into the baling chamber, the rotor tilt bottom simply needs to be lowered with the cab computer panel, the PTO started and then the rotor bottom returned to its original position.

### New, reliable chain lubrication system

based on a mechanical pump with the possibility of setting an individual oil dose for each chain. It reduces the service time and increases life of driver components. Large oil tank capacity minimizes the time of daily machine servicing.

### Pressing roller

helps to maintain an even feeding of the picked up material and ensures its initial pressing.

### Tool-free adjustment of the pick-up's support wheels

allows you to quickly and easily adjust its working height, adapting it easily to changing terrain conditions and swath density.

### Individual knife protection

protects the chopper from stones or other elements that could damage it. It also increases the life of the machine.

### Net binder

„duck-bill“ type, provides direct application of the net straight to the rolling chamber, ensuring a correctly wrapped bale.

### Binding system

can accommodate net up to 1.3 m in width and 4500 m in length. The number of wrapped net layers is set on the electronic controller by the operator.

### Net loading and replacement

is done from the ground level, without the need to climb onto the machine.

### Grouped bearing lubrication points

reduce the service time, extend the life of the bearings and increase the comfort of machine operation.

### Double-row barrel bearings

installed on the rollers which work under the highest load, assure long operating life and reliability of the machine.

### Hydraulic system

with electrohydraulic power block, which operates all working parts of the machine and assures its steady and optimum performance. The continuous oil cycle in the hydraulic system allows automatic starting of machine functions without manual intervention of the operator.

### Automatic lubrication of bearing of wrapping rolls and shredder (additional equipment)

delivers effectively grease to all points by means of pipes thanks to advanced pressure system. The automatic bearing lubrication system makes it possible to reduce the servicing time of the machine by limiting the lubricating activity to filling up a container with lubricating liquid.

### Longer drawbar

with the option of fitting it with 40mm or 50mm diameter hitching eyes and a K80 ball and equipped with a shaft support to ensure its stability when the machine is uncoupled from the tractor.

### Modern LED road lighting

for even greater safety on the road after dark.

### Wide angle PTO shaft with automatic clutch

ensures possibility of working with the machine at turns and protects the machine against overload damage.

### Coupling device (additional equipment)

enables connecting it with bale wrappers SIPMA OS 7531 MAJA or SIPMA OS 7650 GAJA, thanks to this feature we obtain a bale wrapped in foil in one pass, while saving time and money.

### Electronic control

is responsible for adjustment and supervision over the run cycle of collection, wrapping and unloading of bales. It also monitors the correct operation of the machine mechanisms.



ELECTRONIC CONTROLLER

### Functions of the electronic controller:

- activation and carrying out an automatic cycle of the machine operation;
- defining the number of binds of a bale with a net;
- control of equal spread of material in the chamber;
- defining and control of compression ratio;
- visualization of the currently performed operation;
- supervision and sensor status display;
- enables control over the pickup, the blades and the tilt rotor floor at any moment of the machine work cycle;
- indication of the number of bales made, working time, efficiency and remaining net in roll.



MODEL		PS 1210 CLASSIC	PS 1211 FARMA PLUS
Pick-up width	mm	2000	2000
Chamber type		chain	chain
Number of baling rollers		×	×
Baling chamber dimensions			
width	mm	1200	1200
diameter	mm	1200	1200
Chamber lock		hydraulic	mechanical
Shredder (maximum number of knives)	pcs.	×	×
Knives protection		×	×
Knives operation		×	×
Unlocking system		×	×
Feeler wheels		steel	steel
PTO rotation speed	rpm	540	540
Power demand			
without shredding	kW (HP)	40 (55)	40 (55)
with shredding	kW (HP)	-	-
Equipment			
wide angle PTO shaft		○	○
pressing roller		×	×
twine binder		●	×
net binder		○	●
electronic control		○	●
automatic chain lubrication		○	●
grouped bearing lubrication points		●	●
automatic bearing lubrication		×	×
coupling device		○	○
wide tyres 400 / 60 - 15,5		○	●
wide tyres 500 / 50 - 17		×	×
swivel hitch eye (diameter = 50 mm)		●	●
swivel hitch eye (diameter = 40 mm)		○	○
ball hitch K80		○	○
Dimensions			
length	mm	3300	3300
width	mm	2400	2400
height	mm	2200	2200
Weight	kg	2010	2060

PS 1221 FARMA PLUS	PS 1225 FORTIS	PS 2320 FORTIS PRO	PS 2520 KRONOS
2000	2050	2200	2200
roll-chain	roll-chain	roll-chain	roll
5	7	7	17
1200	1200	1200	1200
1200	1200	1200	1250
mechanical	mechanical	mechanical	mechanical
×	○ (11)	● (15)	● (15)
×	mechanical	mechanical	mechanical
×	hydraulic	hydraulic	hydraulic
×	mechanical / moving floor	moving floor	moving floor
steel	pneumatic	pneumatic	pneumatic
540	540	540	540
50 (69)	55 (75)	55 (75)	60 (82)
-	70 (95)	70 (95)	75 (102)
○	●	●	●
×	●	●	●
×	×	×	×
●	●	●	●
●	●	●	●
●	●	●	●
×	×	×	○
○	○	×	○
●	×	○	○
×	●	●	●
●	●	●	●
○	○	○	○
○	○	○	○
3300	4100	4860	4600
2400	2400	2800	2800
2200	2300	2370	2500
2150	2630	2630	3190

● – standard, ○ – additional equipment, × – unavailable



## CUBE BALER

SIPMA PK 4010 KOSTKA



SIPMA PK 4010 KOSTKA cube baler is excellent straw collecting machine, also effective in collection of hay. The optimum design, excellent operating parameters, as well as high durability and reliability are the reasons why SIPMA S.A. has been manufacturing these machines for more than 30 years, continuously improving them. Almost 100,000 machines were sold to farmers so far.

### Pressing chamber design

allows adjusting the pressure force (up to 180 kg/m<sup>3</sup>), setting the cube length from 0.3 to 1.3 m and adjusting the plane of the ejected cube.

### Balanced crank and piston system

improves the working conditions for the operator by eliminating the harmful effect of vibrations affecting the tractor.

### Hydraulic pickup lifting system

increases the safety and comfort of operation.

### Double binding device

quickly and accurately binds bales formed by the square baler.

### Machine protection devices

ensure long-lasting and safe operation. The one-way friction clutch at the flywheel (900 Nm) protects the drive shaft. Behind the flywheel is the main automatic clutch, which protects the whole machine (with six disc springs). The shear bolts protect the needles and binding apparatuses. In addition, the reel and harvester are equipped with overload clutches.

### Electrical installation

enables driving the machine on public roads without additional costs.

### Bale chute (additional equipment)

ensures transport of bales directly to trailers towed behind the baler, thus significantly reducing the labour consumption and increasing harvest effectiveness. Moreover, use of the slide increases the pressure ratio.

### Wire binding knotter (additional equipment)

mounted on special order.

### Wire container

in version with a wire binding knotter, ensures smooth delivery of the wire to the binding apparatus.



### Electronic counter (additional equipment)

allows to control the number of made bales.

### Hydraulically adjustable drawbar (additional equipment)

improves the comfort of work and shortens the time of moving the machine from transport to working position and back.

### Knotter fan (additional equipment)

prevents the accumulation of fine material in the area of the binding apparatuses, eliminating its influence on the binding efficiency.

### Feeler wheel of the pickup with tyre (additional equipment)

increase comfort of pickup work and improves the copying efficiency, especially in wetlands.



MODEL		PK 4010 KOSTKA
Pick-up width	mm	1780
Bale chamber width	mm	460
Bale chamber height	mm	400
Bale length - smooth adjustment	mm	300 - 1300
Pressure level	kg /m <sup>2</sup>	≤ 180
Pick-up lifting		hydraulic
Drawbar setting		mechanical
PTO rotation speed	rpm	540
Power demand	kW (HP)	28.5 (38)
Recommended parameters of binding twine		
nominal linear mass of sisal twine	tex	4500 - 6700
nominal linear mass of propylene twine	m/kg	300 - 400
Equipment		
PTO shaft		●
bale chute		○
wire binding knotter		○
electronic counter		○
Dimensions		
length	mm	4900
width	mm	2500
height	mm	1600
Weight	kg	1560

● – standard, ○ – additional equipment, × – unavailable



## ENSILAGE BALER

SIPMA PL 7000 SILO



Ensilage balers are basic machines with the technology for ensiling the fodder in film sleeves. Their functionality makes them usable on farms around the world.

Ensilage baler SIPMA PL 7000 SILO is designed for high-compression filling of plastic sleeves with a length of 75 m and a diameter of 2.7 meters (9ft) with material intended for production of silage. Also maize green forage, wet grain, grass (pasture forage), lucerne and clover, beet pulp and brewer's grains can be used to fill the sleeves.

Through complete and homogeneous filling of the film sleeve, the user is able to obtain high-quality forage while minimizing losses. The perfect compression of plant material in the sleeve allows you to obtain a lasting silage.

### **Ensilaging technology with an ensilaging press reduces the unit costs**

compared to silage in silos, eliminating the need to compress the material and investment risk associated with building a silo.

### **Mobility of the baler**

provides high flexibility of storage of the ensilaged material.

### **Wide belt feeder**

ensures easy loading of the material from the transporting equipment and great freedom in relation to the type of ensilaged forage.

### **Rotor with hydraulic braking system**

provides very good compression of the ensilaged bulk, which provides the anaerobic conditions and the correct course of the fermentation process.

### **Interchangeable overlays of rotor teeth**

allow you to extend the service life of the machine.

### **Electrohydraulic block**

that operates all working elements of the machine provides consistent and optimum functions of the machine.



BELT FEEDER

## Electronic control

is responsible for adjustment and monitoring of the course of filling the sleeve with ensilaged material.



ELECTRONIC CONTROLLER

### Functions of the electronic controller:

- control of the working elements of the machine;
- performing the automatic operation cycle of the machine;
- control of evenness of the sleeve filling by ensuring a constant speed of the conveyor feeding the material;
- visualization of the currently performed operation.

### Ensilaging substances applicator

gives the possibility to add and mix well preservatives while packing it into the sleeve.

### Foil sleeves

make the area of opening for taking forage much smaller than the area of extracting silage from silos, which minimizes losses when the sleeve is opened and the forage is taken from it.



MODEL		PL 7000 SILO
Foil sleeve diameter	m (ft)	2.7 (9)
Maximum sleeve length	m	75
Aplicator capacity	l	200
Feeder width	mm	2600
Tractor hydraulic pump efficiency	l/min	100 - 150
PTO rotation speed	rpm	1000
Maximum transport speed	km/h	25
Power demand	kW (HP)	160 (218)
Dimensions in working position		
length	mm	5800
width	mm	5600
height	mm	2960
Dimensions in transport position		
length	mm	7360
width	mm	2560
height	mm	3500
Weight	kg	6500

SIPMA OZ 7500 TEKLA  
SIPMA OS 7510 KLARA  
SIPMA OS 7520 MIRA  
SIPMA OS 7521 MIRA

SIPMA OS 7530 MAJA  
SIPMA OS 7531 MAJA  
SIPMA OS 7650 GAJA  
SIPMA OR 7532 DIANA  
SIPMA OG 9750 LENA



SIPMA OS 7650 GAJA

Technology of hay silage processing into filmwrapped round bales ensures the highest quality of fodder.

The basic machines used in this process are bale wrappers designed to wrap the bales made of semi-dry grass or papilionaceous plants with the dry mass content of 40-50%. The bales are wrapped with a special stretch film, which protects the ensilaged material from air, moisture and light. The ensilage process takes about 6 weeks, after which the fodder is suitable for animals.

SIPMA offers bale wrappers with advanced design features which meet the demands of all users.

### Main advantages of the offered technology are:

- independence from weather conditions;
- possibility of ensiling small amounts of fodder;
- no losses related to the process of harvesting, ensiling, storage and feeding;
- easy fodder pickup and portioning;
- low man labour costs;
- elimination of environmental pollution by silage juices.

## SIPMA OZ 7500 TEKLA SIPMA OS 7510 KLARA

### Solid frame

made from bent and welded sections, makes the whole design stable and resistant to overloads.

### Universal foil film dispenser

used in the SIPMA bale wrappers allows using 0.50 and 0.75 m wide films. The 0.75 m wide bale wrapping film requires only 16 turns of the wrapping table and greatly reduces the wrapping time.

### Aluminium milled foil film dispenser rollers

ensure the initial foil stretching, tightness and proper adhesion during the wrapping process.

### Bale counter

indicates the current number of foil layers and informs about the end of wrapping process.

### Wrapping method

of the loaded bale is that successive film layers overlap each other by 50%. It ensures that the green fodder will be properly stored and efficiently ensiled.



## SIPMA OZ 7500 TEKLA



Stationary SIPMA OZ 7500 TEKLA bale wrapper is designed for small and medium size farms. It is installed on the three-point linkage of the tractor.

### **Tilting table**

allows discharging wrapped bales, protecting them from mechanical damage at the same time. After unlocking the latch, the tilt table is lifted by tractor's hydraulic lifting system and the bale rolls back.

### **Mounted type construction**

allows mounting wrapper on the tractor three-point linkage and bale wrapping at the storage areas with the use of a loader.

### **Specially designed rollers**

ensure proper bale wrapping, so that even shapeless bales rotate properly.

### **Durable, maintenance-free bearings**

ensures long and failure-free work.

### **Foil cutter (additional equipment)**

enables cutting off the foil during the rotation of the table after bale unloading.

### **Bale elevator (additional equipment)**

allows putting bales on their bottom (on the right or left side of the bale wrapper).

## SIPMA OS 7510 KLARA



Self-loading SIPMA OS 7510 KLARA bale wrapper is mounted to the tractor on the three point linkage and has supporting wheels. It is equipped with a lift arm that picks the rolled-up bales from the rear side and allows for wrapping when the tractor moves forward towards the next bale or towards the place of storage. The machine has a modern universal film dispenser (50 cm and 75 cm wide films) as well as a film cut and hold unit eliminating the need of any interventions except for the installation of new film rolls. The machine is controlled from the tractor cab by means of a hydraulic divider.

### **Mounted type construction**

allows mounting wrapper on the tractor three-point linkage enables high mobility of the wrapper and low labor consumption due to one-person operation.

### **Wheels rotating around their vertical axis**

combined with mounting of the machine on the three point linkage, provide high maneuverability of the tractor-wrapper set.

### **Drawbar (additional equipment)**

enables aggregating the bale wrapper by the tractor's transport fastener.

### **Foil catcher (additional equipment)**

enables catching and cutting foil in difficult weather conditions.

### **Hydraulic table lock (additional equipment)**

prevents the table from rotating on unevenness.

MODEL		OZ 7500 TEKLA	OS 7510 KLARA
Bale dimensions			
diameter	mm	1300	1200 - 1300
width	mm	≤ 1250	≤ 1300
Maximum bale weight	kg	1000	1000
Foil width	mm	500 / 750	500 / 750
Bale wrapping time	s	~ 120	~ 120
Minimum number of bale wraps		two times	two times
Power demand	kW (HP)	28.5 (38)	20 (30)
Equipment			
bale elevator		○	×
drawbar (d = 40 mm)		×	○
drawbar (d = 50 mm)		×	○
foil catcher		×	●
foil cutter		○	●
hydraulic table lock		×	○
mechanical table lock		×	●
Dimensions			
length	mm	2600	2170
width	mm	1200	1940
height	mm	1200	2150
Weight	kg	480	780

● – standard, ○ – additional equipment, × – unavailable

## SIPMA OS 7520 MIRA SIPMA OS 7521 MIRA

### „Side-back“ technological system

allows working in a direction perpendicular or parallel to the direction of the press work (across a field), ensures fast loading of bales, wrapping with foil during the drive until the next bale and high efficiency.

### Universal foil film feeder

allows the use of 0.50 and 0.75 m wide films.

### Aluminium milled foil film feeder rollers

ensure the initial foil stretching, tightness and proper adhesion during the wrapping process.

### Bale elevator

allows for putting bales on their bottom or rolling them on their side surface into the field and also protects the wrapped bale from possible damage during unloading.

### Hydraulic film catcher-cutter

works automatically after each bale wrapping process. It provides a considerable acceleration of the wrapping process and its efficiency.

### Wide tyres

provide the opportunity to work on wetlands and peat fields.

### Autonomous hydraulic power system (additional equipment):

- separates the hydraulic system of the wrapper from the hydraulic system of the cooperating tractor;
- ensures constant and optimal demand of oil supplying the hydraulic block of the wrapper;
- maintains a constant level of oil purity in the system.



## SIPMA OS 7520 MIRA



Self-loading bale wrapper SIPMA OS 7520 MIRA is an economical version of the MIRA bale wrappers, mechanically controlled by the lever distributor.

### Bale wrapping counter

shows the current number of foil wraps, informs about the end of the bale wrapping cycle and counts number of wrapped bales.

### Lever distributor

allow to control the wrapper from the tractor cabin.



BALE WRAPPING COUNTER



LEVER DISTRIBUTOR

## SIPMA OS 7521 MIRA



SIPMA OS 7521 MIRA bale wrapper is fully automated self-loading machine, attached to the tractor. Full automation of the process is provided by an advanced control system which allows pre-programming a wrapping cycle.

### Advanced hydraulic block

provides lower flow resistance in the hydraulic system and gives more control possibilities thanks to the option of setting the speed of all working elements of the wrapper.

### Hydraulic system with Load-Sensing function (additional equipment)

contributes to the reduction of fuel consumption and extends the service life of the tractor's hydraulic pump.

### Improvement the work culture of the hydraulic system

through the double reduction of average work pressure and the reduction of power consumption.

### Sensor on the loading arm

enables automatic initiation of the wrapping process.

### Drive motor brake

makes impossible to move the table during the drive.

### Electronic control

ensures fully automatic operation of the machine and control of all the parameters of its operation.





ELECTRONIC CONTROLLER

### Functions of the electronic controller:

- manual or fully automatic operation of the wrapper;
- graphic visualization of current wrapping process;
- counting the number of wrapped bales;
- programming the number of foil layers (depending on the kind of film used), when reached, the machine passages automatically to next work stage;
- displaying the status of sensors (evaluation of efficiency or inefficiency of their operation) allows to replace damaged sensor, without the need to call the service;
- displaying the sum of wrapped bales since the installation of the electronic control on the wrapper;
- automatic machine setting for work and transport;
- large LCD graphic display showing the actual work parameters;
- smooth adjustment of rotation speed and lifting and lowering of the wrapping table;
- smooth regulation of the speed of lifting and lowering of the loading arm;
- number of table turns can be corrected without interrupting the wrapping process;
- table rotation speed can be corrected without interrupting the wrapping process;
- possibility of pausing the automatic table wrapping mode and resuming it at the storage location;
- foil feeding control - an additional sensor of foil stops the bale wrapping process in case of foil breaks or finishes;
- controlling the condition of the oil filter contamination;
- editing all parameters of the automatic mode;
- foreign language support.



MODEL		OS 7520 MIRA	OS 7521 MIRA
<b>Bale dimensions</b>			
diameter	mm	1200 - 1500	1200 - 1500
width	mm	≤ 1250	≤ 1250
Maximum bale weight	kg	1000	1000
Foil width	mm	500 / 750	500 / 750
Wrapper drive		hydraulic	hydraulic
Bale wrapping time	s	~ 60	~ 60
Oil demand	l/min	20 - 90	20 - 90
Power demand	kW (HP)	≥ 35 (48)	≥ 35 (48)
<b>Equipment</b>			
bale elevator		●	●
universal foil feeder (500 / 750)		●	●
foil roll feeder		●	●
hydraulic foil catcher-cutter		●	●
electronic control		×	●
lever distributor		●	×
electric installation allowing to move on public roads		●	●
wide tyres 400 x 60 - 15,5		●	●
hydraulic system with Load-Sensing function		×	○
autonomous hydraulic power system		○	○
<b>Dimensions in operating position</b>			
length	mm	4600	4600
width	mm	4100	4100
height	mm	2300	2300
<b>Dimensions in transport position</b>			
length	mm	4600	4600
width	mm	2400	2400
height	mm	2800	2800
Weight	kg	1540	1550

● – standard, ○ – additional equipment, × – unavailable

# SIPMA OS 7530 MAJA

## SIPMA OS 7531 MAJA

## SIPMA OS 7650 GAJA

### „Front-back“ technological system

allows work in the same direction as press works. Such solution ensure fast bale loading and foil-wrapping during ride to the next bale. Coupling with press, ensuring simultaneously baling and wrapping during one ride.

### Universal foil film feeder

(SIPMA OS 7530 MAJA and SIPMA OS 7531 MAJA)

allows the use of 0.50 and 0.75 m wide films.

### Aluminium milled foil film feeder rollers

ensure the initial foil stretching, tightness and proper adhesion during the wrapping process.

### Bale elevator

allows for putting bales on their bottom or rolling them on their side surface into the field and also protects the wrapped bale from possible damage during unloading.

### Wide tyres

provide the opportunity to work on wetlands and peat fields.

### Hydraulic film catcher-cutter

works automatically after each bale wrapping process. It provides a considerable acceleration of the wrapping process and its efficiency.

### Adjustable drawbar

the working and transport position enables efficient collection of bales. It also facilitates moving the machine and its transport on access roads (including public roads) to the field.

### Autonomous hydraulic power system (additional equipment):

- separates the hydraulic system of the wrapper from the hydraulic system of the cooperating tractor;
- ensures constant and optimal demand of oil supplying the hydraulic block of the wrapper;
- maintains a constant level of oil purity in the system.



ADJUSTABLE DRAWBAR

## SIPMA OS 7530 MAJA



Self-loading bale wrapper SIPMA OS 7530 MAJA is an economical version of the MAJA bale wrappers, mechanically controlled by the lever distributor.

### Bale wrapping counter

shows the current number of foil wraps, informs about the end of the bale wrapping cycle and counts number of wrapped bales.

### Lever distributor

allow to control the wrapper from the tractor cabin.



BALE WRAPPING COUNTER



LEVER DISTRIBUTOR



## SIPMA OS 7531 MAJA



SIPMA OS 7531 MAJA bale wrapper is fully automated self-loading machine, attached to the tractor. Full automation of the process is provided by an advanced control system which allows pre-programming a wrapping cycle.



ELECTRONIC CONTROLLER

### Functions of the electronic controller:

- manual or fully automatic operation of the wrapper;
- graphic visualization of current wrapping process;
- counting the number of wrapped bales;
- programming the number of foil layers (depending on the kind of film used), when reached, the machine passages automatically to next work stage;
- displaying the status of sensors (evaluation of efficiency or inefficiency of their operation) allows to replace damaged sensor, without the need to call the service;
- displaying the sum of wrapped bales since the installation of the electronic control on the wrapper;
- automatic machine setting for work and transport;
- number of table revolutions can be corrected without interrupting the wrapping process;
- possibility of pausing the automatic table wrapping mode and resuming it at the storage location;
- foreign language support.

## SIPMA OS 7650 GAJA



SIPMA OS 7650 GAJA bale wrapper is fully automated self-loading machine, attached to the tractor. Full automation of the process is provided by an advanced control system which allows pre-programming a wrapping cycle.

The wrapper is distinguished by an advanced hydraulic system, which was expanded with hydraulically adjustable drawbar. The advantage is also visible in the economics of the wrapping process itself, which saves working time by 12 hours per 1000 bales and reduces fuel consumption by 110 liters per 1000 bales.

With all of the advantages from MAJA bale wrappers series, the bale wrapping machine GAJA has strengthened construction which allows to work with bales that weigh up to 1200 kilograms and an electronic control that shows simulation of work on the display.

### Advanced hydraulic block

provides lower flow resistance in the hydraulic system and gives more control possibilities thanks to the option of setting the speed of all working elements of the wrapper.

### Hydraulic system with Load-Sensing function (additional equipment)

contributes to the reduction of fuel consumption and extends the service life of the tractor's hydraulic pump.

### Improve the work culture of the hydraulic system

through the double reduction of average work pressure and the reduction of power consumption.

### Oil filter contamination control

signals the need to replace it when the permissible level of its contamination is exceeded.

### Hydraulically adjustable drawbar

to the working and transport position enables efficient collection of bales. It also facilitates moving the machine and its transport on access roads (including public roads) to the field.

### Sensor on the loading arm

enables automatic initiation of the wrapping process.

### Loading arm smooth regulation

of the speed of lifting and lowering.

### Wrapping table smooth adjustment

of rotation speed and lifting and lowering.

### DUO foil feeder (additional equipment)

gives the possibility of wrapping the bale with two rolls of foil at the same time, which in turn significantly reduces the machine's work cycle. This solution allows for the correct bale wrapping after its 10th rotation (for 4 layers of foil).

### Drive motor brake

makes impossible to move the table during the drive.

### Additional film sensor

an additional sensor of foil stops the bale wrapping process in case of foil breaks or ends.

### Large LCD graphic display

enables a simple and intuitive way to enter operating parameters and clearly shows the condition of the wrapper sensors.



### Electronic control

ensures fully automatic operation of the machine and control of all the parameters of its operation.



ELECTRONIC CONTROLLER

### Functions of the electronic controller:

- manual or fully automatic operation of the wrapper;
- graphic visualization of current wrapping process;
- counting the number of wrapped bales;
- programming the number of foil layers (depending on the kind of film used), when reached, the machine passages automatically to next work stage;
- displaying the status of sensors (evaluation of efficiency or inefficiency of their operation) allows to replace damaged sensor, without the need to call the service;
- displaying the sum of wrapped bales since the installation of the electronic control on the wrapper;
- automatic machine setting for work and transport;
- large LCD graphic display showing the actual work parameters;
- smooth adjustment of rotation speed and lifting and lowering of the wrapping table;
- smooth regulation of the speed of lifting and lowering of the loading arm;
- number of table revolutions can be corrected without interrupting the wrapping process;
- table rotation speed can be corrected without interrupting the wrapping process;
- possibility of pausing the automatic table wrapping mode and resuming it at the storage location;
- foil feeding control - an additional sensor of foil stops the bale wrapping process in case of foil breaks or finishes;
- controlling the condition of the oil filter contamination;
- editing all parameters of the automatic mode;
- foreign language support.

## SIPMA OR 7532 DIANA

MODEL		OS 7530 MAJA	OS 7531 MAJA	OS 7650 GAJA
Bale dimensions				
diameter	mm	1200 - 1500	1200 - 1500	1200 - 1500
width	mm	≤ 1250	≤ 1250	≤ 1250
Maximum bale weight	kg	1000	1000	1200
Foil width	mm	500 / 750	500 / 750	750
Wrapper drive		hydraulic	hydraulic	hydraulic
Bale wrapping time	s	~ 100	~ 100	~60
Oil demand	l/min	≥ 20	20 - 40	20 - 90
Power demand	kW (HP)	≥ 35 (48)	≥ 35 (48)	≥ 35 (48)
Equipment				
bale elevator		●	●	●
universal foil feeder (500 / 750)		●	●	×
foil roll feeder		●	●	●
hydraulic foil catcher-cutter		●	●	●
electronic control		×	●	●
lever distributor		●	×	×
electric installation allowing to move on public roads		●	●	●
wide tyres 400 x 60 - 15.5		●	●	●
hydraulic system with Load-Sensing function		×	×	○
autonomous hydraulic power system		○	○	○
DUO foil feeder		×	×	○
bale marker		○	○	○
Dimensions in operating position				
length	mm	5760	5760	5760
width	mm	3160	3160	3160
height	mm	2210	2210	2210
Dimensions in transport position				
length	mm	5820	5820	5820
width	mm	2350	2350	2350
height	mm	2430	2430	2430
Weight	kg	1360	1360	1420

● – standard, ○ – additional equipment, × – unavailable



SIPMA OR 7532 DIANA bale wrapper is fully automated self-loading, tractor-trailed machine. In addition to the conventional wrapping, it can work in the 3D system, which enables the reduction of foil consumption by about 25%. It has full automation of the entire wrapping process, which will be provided by an on-board computer with the possibility of earlier programming of the work cycle parameters.

### The wrapper gives choice between:

- maximum wrapping speed;
- minimal foil consumption.

### Wrapper design

apart from conventional wrapping they allow to wrap bale in 2 extra dimensions - 3D bale wrapping. This effect is achieved by tilting the foil feeders. The result of this method of wrapping bales is foil savings of approx. 25%.

### „Front-back“ technological system

allows work in the same direction as press works. Such solution ensure fast bale loading and foil-wrapping during ride to the next bale. Coupling with press, ensuring simultaneously baling and wrapping during one ride.

### Bale elevator

allows for putting bales on their bottom and protects the wrapped bale from possible damage during unloading.

### Hydraulic film catcher-cutter

works automatically after each bale wrapping process. It provides a considerable acceleration of the wrapping process and its efficiency.

### Wrapping speed

depends on chosen technique of wrapping:

- conventional 2D wrapping - wrapping cycle last about 50 seconds and 8 spins of arms are enough to wrap whole bale. The 2D wrapping gives opportunity to save working time;
- 3D wrapping - wrapping cycle last about 65 seconds, and is realized in 2 stages: circumferential wrapping with a horizontal arrangement of foil feeders and wrapping bottom of the bale with vertical arrangement of foil feeders. 3D wrapping is more laborious but allows to reduce consumption of foil approx. 25%.

### Foil consumption per bale

during conventional 2D wrapping requires: approx. 60 m of foil, while during 3D wrapping amount needed lowers to approx. 45 m.

### Wide tyres

provide the opportunity to work on wetlands and peat fields.

### Foil feeders

allow the use of 0.75 m wide films.

### Aluminium milled foil film feeder rollers

ensure the initial foil stretching, tightness and proper adhesion during the wrapping process.



### Tray for 6 extra rolls of foil

enables smooth and economical operation without unnecessary downtime.

### Hydraulically adjustable drawbar

makes it easier to relocate the machine and its transport on access roads to the field.

### Hydraulic system with Load-Sensing function

contributes to the reduction of fuel consumption and extends the service life of the tractor's hydraulic pump.

### Electronic control

ensures fully automatic operation of the machine and control of all the parameters of its operation.



ELECTRONIC CONTROLLER

### Functions of the electronic controller:

- manual or fully automatic operation of the wrapper;
- current monitoring of the wrapping process;
- counting the number of wrapped bales;
- measurement of device operation time [h] with an accuracy of 1 minute;
- ability to program the number of wraps (when it goes over programmed number of wraps - wrapping process stops);
- displaying the status of sensors (evaluation of efficiency or inefficiency of their operation) allows to replace damaged sensor, without the need to call the service;
- large LCD graphic display showing the actual work parameters;
- smooth adjustment of the rotational speed of the arms during operation;
- ability to program speed of lifting and lowering loading device;
- foil feeding control - an additional sensor of foil stops the bale wrapping process in case of foil breaks or finishes;
- controlling the condition of the oil filter contamination;
- displaying the sum of wrapped bales since the device were installed on the wrapper;
- displaying on-screen operating information for the entire current season.

## SIPMA OG 9750 LENA

MODEL		OR 7532 DIANA
Bale dimensions		
diameter	mm	1200 - 1500
width	mm	≤ 1200
Maximum bale weight	kg	1000
Foil width	mm	750
Wrapper drive		hydraulic
Bale wrapping time	s	50 - 65
Oil demand	l/min	≥ 35
Power demand	kW (HP)	≥ 37 (50)
Equipment		
bale elevator		●
foil feeders (750)		●
foil roll tray		●
hydraulic foil catcher-cutter		●
electronic control		●
electric installation allowing to move on public roads		●
hydraulically adjustable drawbar		●
wide tyres 340 / 55 - 16 14PR		●
hydraulic system with Load-Sensing function		●
Dimensions in operating position		
length	mm	5490
width	mm	3680
height	mm	2890
Dimensions in transport position		
length	mm	4230
width	mm	2380
height	mm	2890
Weight	kg	1550

● – standard, ○ – additional equipment, × – unavailable



Serial bale wrapper machine (for non-stop wrapping) SIPMA OG 9750 LENA is designed for wrapping round and square bales. Bales of semi-dry hay (with humidity of 60%), after wrapping with a special stretchy self-adhesive foil, create a foil sleeve of several dozen meters filled with pressed bales of dried green forage intended for haylage. Thanks to the linear arrangement of the bales, the necessity of wrapping the contact surface is eliminated, thanks to which the saving of film can reach 50% compared to conventional wrapping. Bales are wrapped on the spot, so there is no risk of damage related to transport to the storage field.

### Self-propelled machine

through the use of the combustion engine with integrated hydraulic pump, the serial wrapper gained full autonomy and independence from the cooperating tractor.

### Hydraulic system

ensures constant and optimal use of the machine functions thanks to the electro-hydraulic block that operates all the working elements of the wrapper. Continuous oil circulation in the hydraulic system makes it possible to automatically start the machine's functions without the need to engage the operator.

### Automatic wrapping process

it is supervised by the electronic controller. It allows one-man work with the machine, during which the operator concentrates only on placing bales on the wrapper.

### Electronic controller

is responsible for controlling and supervising the correct course of the wrapping and bale unloading cycle. It allows to operate each of the wrapper's working elements and monitors the correct operation of its mechanisms.

#### Functions of the electronic controller:

- activates and performs the automatic operation cycle of the machine;
- defining the number of wrapping the bale with foil;
- graphic visualization of current wrapping process;
- supervision and displaying the status of sensors;
- handling of all working elements of the wrapper;
- supervision over the of foil feeding process;
- possibility of independent movement of the wrapper over short distances.



ELECTRONIC CONTROLLER

### Universal feeding table

is adapted to load both round and prismatic bales, so that the user has complete freedom to expand their machine park.

### Drive wheels with traction tyres

enable autonomous movement of the wrapper over short distances and, in cooperation with the hydraulic system, provide adequate compression of bales during the wrapping process.

### Tool-free adjustment

allows for quick and easy setting of the wrapper, adjusting it to work with bales of various shapes and lengths.

### Installing and replacing foil film

takes place from the ground, without need to climb onto the machine.

### Two foil film feeders

make it possible to use a 750 mm wide foil film. They are equipped with breaking sensor, which pauses the wrapping process when it detects that the film has run out.

### Shield sensors

stop the bale wrapping process when the shield is opened, thus protecting the operator from the risk of injury.

### Transport drawbar

enables aggregation of the wrapper with a tractor through a transport hitch.

MODEL		OG 9750 LENA
Dimensions of round bales		
diameter	mm	1200 - 1800
width	mm	≤ 1500
Dimensions of square bales		
width	mm	800 - 1200
height	mm	1200 - 2000
length	mm	≤ 2000
Maximum bale weight	kg	1000
Foil width	mm	750
Wrapper drive		combustion engine
Maximum performance	bales/h	100 - 120
Maximum number of foil wraps		6
Output of the hydraulic system	l/min	30
Engine power	kW (HP)	8.7 (11.83)
Dimensions		
length	mm	5700
width	mm	2900
height	mm	3300
Weight	kg	2530





## SELF-LOADING STACKING TRAILER

### SIPMA WS 6510 DROMADER



SIPMA WS 6510 DROMADER trailer is a multi-purpose self-loading low-chassis trailer with a loading capacity of 6.5 tons. The trailer slips its side fork under a bale and picks it up it from the ground. The bale is then moved by special arms towards the rear part of the body in order to make space for next bales.

#### Load body design

enables the trailer to collect and transport bales (up to 8 bales with the diameter of 1.2 - 1.5 m), crops and other materials (e.g. sand).

#### Hydraulic distributor

enables control from the cabin and ensures large comfort of work and high efficiency.

#### Support foot

increases the stability of the trailer during the loading of heavy green fodder bales and also improves the safety of work.

#### Pneumatic brakes

on all wheels and hand brake guarantee high safety of work.

#### Road lights

allow the machine to be used on public roads without incurring additional costs.

#### Tandem chassis

(rigid axles) and reinforced structure increase durability and resistance providing a load capacity of 6.5 t.

#### Hydraulic actuator

ensures bale unloading to the side, sliding backwards and vertical stacking, enabling adaptation to the different needs of users.

MODEL		WS 6510 DROMADER
Capacity	t	6,5
Maximum bale number	pcs.	8
Maximum bale weight	kg	800
Backward dumping angle		90°
Side dumping angle		45°
Maximum speed	km/h	25
Power demand	kW (HP)	60 (82)
Load box dimensions		
length	mm	4000
width	mm	2200
height	mm	370
Dimensions of the stacking trailer		
length	mm	6440
width	mm	2630
height	mm	3200
Weight	kg	2610



SIPMA RB 1200 KRUK

SIPMA RB 1500 KRUK

SIPMA RB 1850 KRUK

NEW PRODUCT

SIPMA RB 1200 KRUK

SIPMA RB 1500 KRUK



SIPMA RB 1500 KRUK



SIPMA RB 1200 KRUK and SIPMA RB 1500 KRUK are designed for shredding, feeding or spreading of hay, straw and hay silage in stables or open areas.

### Multi-purpose design of the shredder

allows feeding of the hay silage or spreading of straw in stables or open areas. The SIPMA RB 1200 KRUK bale shredder is designed to shred round bale, while the SIPMA RB 1500 KRUK shreds both round and square bales.

### Machine control

by three-sectional hydraulic distributor in SIPMA RB 1200 KRUK or by electronic controller in SIPMA RB 1500 KRUK allows for full control over the processing from the tractor driver's seat.

### Hydraulically controlled ejector channel

allows for diverting the shredded material directly to the mangers and adjusting the ejection up to 14 m (when spreading straw). The SIPMA RB 1500 KRUK shredder allows control of the ejection channel direction in the range of 200°.

### Knife drum

shreds the fed material and feeds it to the discharge rotor shoulder blades, ensuring high discharge and efficiency of the machine. The SIPMA RB 1500 KRUK bale shredder is equipped with two shredding barrels.

### Grate mounted above the knife drum

ensures an even source of material on the knife drum, protects the machine against clogging and increases its value and reliability.

### Mechanical, chain floor conveyor

thanks to the hydraulic drive, it can operate with a variable, steplessly adjustable speed.

### Back loading wall

activated by a hydraulic acuator allows for easy and quick loading of the bale onto the machine.

### Oil flow regulator in the hydraulic distributor

allows for controlling the speed of the bottom-mounted conveyor, which slides the material on the shredding drum. This enables adapting the linear speed of the conveyor to the type of shredded material and ensures optimal use of the machine's utilization capabilities.

### Loading area monitoring system

in the SIPMA RB 1200 KRUK shredder, allows the user to observe the full loading process of the bale. Components, such as a camera with a wide-angle lens located at the rear of the working chamber and large, readable display significantly increase the safety and comfort of machine operation.



## SIPMA RB 1850 KRUK

NEW PRODUCT



The SIPMA RB 1850 KRUK is a trailed shredder for straw, hay and haylage. The shredder is designed for livestock farms for both straw bedding, which provides protection and absorbs moisture, as well as for feeding. It is also used by gardeners and fruit growers to spread straw between rows of strawberries, for example.

### The load box

allows loading of one straw bale with a maximum diameter of 1.8 m or two bales of haylage with a diameter of 1.5 m.

### A transverse knife drum

equipped with tines and knives to shred the material, so that the feed is distributed evenly over the entire blower surface.

### Adjustment of material shredding

possible due to individual setting and arrangement of the number of knives and takers.

### The hydraulically controlled ejection chimney

allows the shredded material to be channelled directly into the feed hoppers and the ejection range can be adjusted to a distance of up to approx. 18 m (e.g. for straw bedding). The rotating ejection chimney has an infinitely variable 300-degree directional adjustment, which allows the material to be spread to both the left and right side, ensuring a high throughput and efficiency of the machine.

### The belt transmission

driving the knife drum, guarantees quiet and smooth operation.

### Hydraulic adjustment of the position of the grate

mounted above the knife drum, ensures even feeding of the material onto the drum, protects the machine from clogging and increases its durability and reliability.

### Electronic controller

allows infinite adjustment of all machine functions from the tractor cab.

### Functions of the electronic controller:

- conveyor speed and direction;
- position of the rear loading flap;
- position and height of the ejection chimney;
- movement of the grating over the knife drum;
- switching the knife drum on and off.

### An additional control unit

located at the rear of the machine allows the machine operator to load bales easily and safely.

### Two rotor speeds

adjustable via a gearbox according to needs: higher for straw strewing and lower for forage feeding.

### Mechanical chain floor conveyor with hydraulic drive

can operate at variable speeds, infinitely adjustable.

### A rear loading wall

actuated by hydraulic cylinders allows bales to be easily and quickly loaded into the shredder chamber.



## MINERAL FERTILIZER DISTRIBUTORS

MODEL		RB 1200 KRUK	RB 1500 KRUK	RB 1850 KRUK
Maximum straw spreading range	m	14	15	18
Maximum fodder feeding height	mm	1200	2500	1400
Maximum width of shredded bales	mm	1200	1500	1300
Maximum diameter of shredded bales	mm	1200	1800	1800
Expected bale shredding time	min	3	2	2
Bales capacity	pcs.	1	2	2
Load box length	mm	1350	2350	1600
Load box width	mm	1300	1600	1400
PTO rotation speed	rpm	540	540	540
Power demand	kW (HP)	40 (55)	60 (80)	50 (70)
Equipment				
PTO shaft		●	●	●
electronic control		×	×	●
Dimensions				
length	mm	3400	4960	4620
width	mm	2000	2380	2500
height	mm	1850	2800	2650
Weight	kg	1200	2100	2100

● – standard, ○ – additional equipment, × – unavailable

SIPMA RN 610 ANTEK  
 SIPMA RN 500 BORYNA  
 SIPMA RN 1000 OPTIMA  
 SIPMA RN 1000 OPTIMA PRO

NEW PRODUCT

NEW PRODUCT



Mounted on a three-point hydraulic lift system, two disc fertilizers SIPMA RN 610 ANTEK, SIPMA RN 500 BORYNA, SIPMA RN 1000 OPTIMA and SIPMA RN 1000 OPTIMA PRO are intended for surface distribution of mineral and crystalline fertilizers over farmlands for basic fertilising and plants nourishing.



SIPMA has a modern sowing hall where, with the help of advanced electronic equipment, sowing tables are prepared for all types of mineral fertilizer distributors on the market. SIPMA has focused the technological development on plant nutrition optimization. SIPMA offers a fertiliser spreading program that conforms to any European standards concerning accurate spreading and border spreading.

### Robust frame construction

allowing easy and quick aggregation to the tractor, optimally adapted to the spreader's capacity. It guarantees long-lasting and reliable spreader operation.

### Sowing system

made entirely of stainless steel, it ensures that fertiliser is evenly metered onto the spreading discs and precisely distributes the fertiliser over the field surface.

### Ergonomics of use:

- low filling height;
- tool-free rate and working width adjustment systems;
- hopper filling scale with large inspection holes;
- set of blades for lower spreading range;
- calibration test kit and spreading tables.

### LIMES boundary seeding system mechanically or electronically controlled (additional equipment)

allows work to be carried out at field boundaries in accordance with fertiliser regulations, while ensuring that the correct application rate is delivered right up to the field boundary, and eliminates economic losses resulting from over-fertilisation or the spreading of fertiliser to neighbouring fields. Used when the first tramline lies in the middle of the spreader's working width. Made of stainless steel.



LIMES BORDER SPREADING SYSTEM

### Resilient pendulum stirrer

ensures an even flow of fertilizer to the spreading discs.

### Border spreading discs (additional equipment)

enable fertiliser to spread at the edge of the field. Made of stainless steel.

### Hydraulic seed control

the dual metering and closing gate system is operated independently for both sides, with the possibility of controlling both closing gates simultaneously. Double-acting slide gates can be quickly opened and closed at the ends of the field using a distributor.

### Shut-off valve

(standard equipment) preventing the sliders from opening during travel when the tractor hydraulics are not functioning correctly.

### Shape of the agitator

guaranteeing that fertiliser is taken up from the entire width of the hopper.

### Fine mesh sieves fitted to the tank

protect the spreader against clumped fertiliser or dirt entering the spreading area. For cleaning, the machines easily tilt upwards and lock into place.

### Working parts made of stainless steel

(spreader discs, vanes, hopper bottom sliders and guards) guarantee long-lasting and reliable spreader operation.

### Rack stand cover (additional equipment)

mounted on the hopper makes spreader operation independent of weather conditions. Opening by means of a lever, lockable by means of rubber straps. bolted construction to save transport space and reduce shipping costs.

### Roll-up cover (additional equipment)

ensures maximum fertiliser protection during rainfall while guaranteeing a maximum opening during filling. Opening by means of a lever, lockable by means of rubber straps. bolted construction to save transport space and reduce shipping costs.

### Extensions (additional equipment)

are easily mounted on the main hopper and allow the hopper capacity to be adjusted as required, making the spreader suitable for use on both small and large areas. Simple assembly to the basket, bolted construction which saves transport space and reduces shipping costs.



SIPMA RN 610 ANTEK WITH EXTENSION

### LED road lighting and warning signs

improve safety and increase visibility for road users in all conditions. Eliminates the need for portable lighting when the spreader blinds the tractor lights.

## SIPMA RN 610 ANTEK SIPMA RN 500 BORYNA



SIPMA RN 500 BORYNA

SIPMA RN 610 ANTEK and SIPMA RN 500 BORYNA mineral fertilizer distributors are easy to operate and economical machines designed for smaller and medium-sized farms.

### Spreading discs

equipped with two pairs of blades, allow fertiliser spreading in working widths of 10 - 24 m.

### Transport wheels

facilitating disconnection of the spreader and manoeuvring around the yard.

### Electronic controller (additional equipment)

(only in SIPMA RN 500 BORYNA) supervises fertiliser spreading according to the set operating parameters.



ELECTRONIC CONTROLLER

### Functions of the electronic controller:

- electronic speed-dependent seed rate control. The set application rate is always the same after changing the working speed;
- manual or automatic spreading mode;
- measurement of driving speed by means of a GPS module in automatic mode;
- control of metering sliders;
- determining the dosing aperture based on selected parameters;
- speed programming in manual mode;
- half-seeding possible;
- the possibility of adjusting the dosage while driving;
- the possibility of conducting a spin test;
- measurement of acreage sown and hours worked;
- bin emptying function;
- activation of border sowing with one-sided reduced rate; operation of LIMES border sowing system;
- supports many languages.



MODEL		RN 610 ANTEK	RN 500 BORYNA
Working width	m	10 - 24 *	10 - 24 *
Hopper capacity	l	610	500
with extension 1 x 250 l / 2 x 250 l	l	×	750 / 1000
with extension 1 x 400 l / 2 x 400 l	l	×	900 / 1300
with extension 1 x 600 l	l	1210	×
Maximum load capacity	kg	1450	1350
Filling height	m	0,98	0,95
with extension 1 x 250 l / 2 x 250 l	m	×	1,10 / 1,25
with extension 1 x 400 l / 2 x 400 l	m	×	1,18 / 1,41
with extension 1 x 600 l	m	1,26	×
Filling width	m	1,96	1,73
Total width	m	2,52	2,28
Total length	m	1,26	1,25
Rotation speed of the spreading discs	rpm	720	720
Frame linkage		Cat. II	Cat. II
Basic machine weight	kg	260	240
<b>Control</b>			
Lever-operated hydraulic control		●	●
shut-off valve		●	●
dose adjustment		manual	manual
half-machine seeding cut-off		●	●
Electronic controller - ARETE		×	○
speed measurement		×	manual / GPS
GPS antenna		×	●
controller (display)		×	monochromatic
half-machine seeding cut-off		×	●
<b>Equipment</b>			
PTO shaft with with shear wheel		●	●
PTO shaft with overload clutch		○	○
transport wheels		●	●
LED road lighting		●	●
calibration kit		●	●
extension		○	○
rack stand cover		×	○
roll-up cover		○	○
border spreading discs		○	○
LIMES boundary seeding system - mechanical		○	○
LIMES boundary seeding system - electronic		×	○

● – standard, ○ – additional equipment, × – unavailable  
 \* – depending on the spreading blades and fertilizer spread

## SIPMA RN 1000 OPTIMA NEW PRODUCT

## SIPMA RN 1000 OPTIMA PRO NEW PRODUCT



SIPMA RN 1000 OPTIMA

SIPMA RN 1000 OPTIMA and SIPMA RN 1000 OPTIMA PRO mineral fertilizer distributors are equipped with top solutions for precise fertilizer spreading. They ensure high working efficiency and meet the expectations of the most demanding customers.

### Weight system

(only in SIPMA RN 1000 OPTIMA PRO) allows precise dosage of mineral fertilizer spreading, while also contributing to savings for the farm and protection of the environment.

### Lateral gearboxes with torsionally flexible clutches

supervise the operation of fertilizer spreading according to the set working parameters.

### Spreader hopper

with welded construction for low filling height, made of 3 mm thick steel.

### Spreading discs

equipped with two pairs of blades, allow fertiliser spreading in working widths of 18 - 32 m.

### Machine tilt indicators

help to position the spreader in the correct position in relation to the ground.



MACHINE TILT INDICATOR

### Mud flaps

protect the tractor from contact with the newly seeded fertilizer, at the same time preventing mud from under the tractor wheels from getting onto the spreader's working parts.



MUD GUARD

### Transport wheels

facilitating disconnection of the spreader and manoeuvring around the yard; equipped with brakes.



TRANSPORT WHEEL

### Electronic controller (additional equipment)

(only in SIPMA RN 1000 OPTIMA) supervises fertiliser spreading according to the set operating parameters.



ELECTRONIC CONTROLLER

### Functions of the electronic controller:

- electronic speed-dependent seed rate control. The set application rate is always the same after changing the working speed;
- manual or automatic spreading mode;
- measurement of driving speed by means of a GPS module in automatic mode;
- control of metering sliders;
- determining the dosing aperture based on selected parameters;
- speed programming in manual mode;
- half-seeding possible;
- the possibility of adjusting the dosage while driving;
- the possibility of conducting a spin test;
- measurement of acreage sown and hours worked;
- bin emptying function;
- activation of border sowing with one-sided reduced rate; operation of LIMES border sowing system;
- supports many languages.



## Electronic controller with ISOBUS (additional equipment)

(only in SIPMA RN 1000 OPTIMA PRO) supervises fertiliser spreading according to the set operating parameters.



ELECTRONIC CONTROLLER

### Functions of the electronic controller:

- electronic speed-dependent seed rate control. The set application rate is always the same after changing the working speed;
- measurement of driving speed by means of a GPS module / ISOBUS socket (speed from tractor) in automatic mode;
- control of metering sliders;
- determining the dosing aperture based on selected parameters;
- half-seeding possible;
- the possibility of adjusting the dosage while driving;
- the possibility of conducting a spin test;
- measurement of acreage sown and working hours;
- emptying hopper function;
- activation of border sowing with one-sided reduced rate; operation of LIMES border sowing system;
- ISOBUS solution;
- weight system control;
- weighing system control;
- independent application rate metering to the left/right disc;
- dynamic calibration - correction of fertilizer application rate based on information from the weight system during seeding;
- automatic switching on/off of the machine depending on its position in the field, especially on headlands, entrances, exits and wedges;
- automatic switching of the spreader at headland location and field edges;
- option to create field boundaries based on the first tour of the field;
- automatic recognition of the scattered field area;
- GPS parallel driving function - driving control by means of indicators on the display;
- field map upload function;
- variable rate function;
- large, intuitive, touch-screen color display;
- supports many languages.

MODEL		RN 1000 OPTIMA	RN 1000 OPTIMA PRO
Working width	m	18 - 32 *	18 - 32 *
Hopper capacity	l	1000	1000
with extension 1 x 500 l / 2 x 500 l	l	1500 / 2000	1500 / 2000
Maximum load capacity	kg	2300	2300
Filling height	m	1,12	1,12
with extension 1 x 500 l / 2 x 500 l	m	1,33 / 1,54	1,33 / 1,54
Filling width	m	2,00	2,00
Total width	m	2,30	2,30
Total length	m	1,47	1,54
Rotation speed of the spreading discs	rpm	720	720
Frame linkage		3 suspension heights Cat. II	3 suspension heights Cat. II
Basic machine weight	kg	440	480
<b>Control</b>			
Lever-operated hydraulic control		●	×
shut-off valve		●	×
dose adjustment		manual	×
half-machine seeding cut-off		●	×
Electronic controller - ARETE		○	×
speed measurement		manual / GPS	×
GPS antenna		●	×
controller (display)		monochromatic	×
half-machine seeding cut-off		●	×
Electronic controller - ISOBUS		×	●
speed measurement		×	manual / ISO socket / GPS
ISO socket		×	●
GPS antenna		×	○
ISOBUS		×	●
cable to the tractor terminal		×	●
controller		×	○
controller (display)		×	color - touchscreen
weight system		×	●
variable section dosage		×	●
half-machine seeding cut-off		×	●
<b>Equipment</b>			
PTO shaft with with shear wheel		●	●
PTO shaft with overload clutch		○	○
tilt indicators		●	●
mud flaps		●	●
transport wheels		●	●
LED road lighting		●	●
calibration kit		●	×
extension		○	○
rack stand cover		○	○
roll-up cover		○	○
border spreading discs		○	○
LIMES boundary seeding system - mechanical		○	×
LIMES boundary seeding system - electronic		○	○

● – standard, ○ – additional equipment, × – unavailable

\* – depending on the spreading blades and fertilizer spread

## MANURE SPREADERS

SIPMA RO 600 TAJFUN  
 SIPMA RO 800 TAJFUN  
 SIPMA RO 1000 TAJFUN  
 SIPMA RO 1200 TORNADO  
 SIPMA RO 1400 TORNADO

NEW PRODUCT

NEW PRODUCT

SIPMA RO 600 TAJFUN  
 SIPMA RO 800 TAJFUN  
 SIPMA RO 1000 TAJFUN



SIPMA RO 800 TAJFUN

SIPMA RO 600 TAJFUN, SIPMA RO 800 TAJFUN and SIPMA RO 1000 TAJFUN are used for spreading manure, compost, peat, chicken manure and lime. They can also be used for transport of agricultural commodities after removing the adapter. They are compatible with tractors equipped with a bottom "hitch" type latch and are fully adapted for transport on public roads.

### General purpose adapter

equipped with bottom plates allows for spreading manure, compost, peat, chicken manure and lime.

### Electronic control (additional equipment)

provides convenient control of the machine from the tractor cabin.

### Low loading height

facilitates comfortable work.

### Two-beaters vertical auger adapter

with cutting knives ensures high fragmentation of the spread material as well as a large range and uniformity of spreading.

### Adapter knives made from HARDOX steel

ensure durability of the construction and reliable operation.

### Hydraulically opened rear flap

closes the load box to prevent the load from falling out during transport.

### Wooden protective extensions

protect the side panels against mechanical damage, during loading.

### Double floor conveyor

with an automatic tensioning mechanism is hydraulically driven, what ensures stepless adjustment of the quantity of the spread material.

### Sprung drawbar (additional equipment)

equipped with longitudinal spring leaves provides high comfort of usage.



SPRUNG DRAWBAR



SIPMA RO 1000 TAJFUN

## Tyres

guarantee low rolling resistance and pressure exerted on the ground, which facilitates operation and movement on wet terrain. Self-cleaning tyres ensure convenient operation of the spreader.

## Overload clutch

secures the drive unit in case of potential clogs.

## Mechanical/hydraulic deflectors (additional equipment)

ensure protection of the adapter during transport and adjust spreading width during work.

## Inspection ladder

provides a safe view of the load compartment.

## Front shields

they protect the tractor cab from dirt and any possible damage.

## Gate and box seals

resistant to dilute acids and alkalis, they ensure a durable design and reliability in operation.

## Rotor movement signalling system

warns bystanders of rotating components when the machine is stationary.

## Wide lower blades

they enable the spreading of lime.

## Mudguards

they protect the machine from dirt, ensuring it runs cleaner and more efficiently.

## Docking points for hydraulic, electrical and pneumatic hoses

Protecting their connector from contamination, they ensure ergonomic use of the machine.

MODEL		RO 600 TAJFUN	RO 800 TAJFUN	RO 1000 TAJFUN
Nominal load	t	6	8	10
Capacity	m <sup>3</sup>	7	9	11
Spreading width	m	7.5 - 10	5 - 12	5 - 12
Dose of spread material	kg/s	5 - 60	5 - 60	5 - 60
Number of spreading beaters	pcs.	2	2	2
Suspension		rigid	rigid	rigid
Maximum speed	km/h	25	25	25
Power demand	kW (HP)	55 (75)	65 (88)	75 (102)
<b>Equipment</b>				
wide angle PTO shaft		●	●	●
electronic control		○	○	○
electric control of floor conveyor		○	○	○
rigid drawbar		●	●	●
sprung drawbar		○	○	○
1-wire brake system		●	●	●
2-wire brake system		○	○	○
hydraulic brakes		○	○	○
handbrake		●	●	●
hydraulically opened rear flap		●	●	●
hydraulic reverse of the floor		●	●	●
road lights (electric installation)		●	●	●
inspection ladder		●	●	●
wooden protective extensions		●	●	●
deflectors (mechanical / hydraulic)		○	○	○
tyres 23,1 - 26 18PR		●	●	●
fenders		●	●	●
<b>Dimensions</b>				
length	mm	7680	7680	8330
width	mm	2520	2520	2520
height	mm	2660	2970	3090
loading height	mm	2250	2310	2500
Weight	kg	4250	4560	4680

● – standard, ○ – additional equipment, × – unavailable

## SIPMA RO 1200 TORNADO SIPMA RO 1400 TORNADO

NEW PRODUCT

NEW PRODUCT



SIPMA RO 1200 TORNADO

SIPMA RO 1200 TORNADO and SIPMA RO 1400 TORNADO manure spreaders are used for spreading manure, compost, peat, chicken manure and lime. Characterized by a solid design and large loading capacity.

### Loading box

with the capacity of 13,5 m<sup>3</sup> or 15,5 m<sup>3</sup> ensures high efficiency and can additionally used as high-volume trailer for transport of agricultural commodities.

### General purpose adapter

equipped with bottom plates allows for spreading manure, compost, peat, chicken manure and lime.

### Two-beaters vertical auger adapter

with cutting knives ensures high fragmentation of the spread material as well as a large range and uniformity of spreading.

### Adapter knives made from HARDOX steel

ensure durability of the construction and reliable operation.

### Tandem type suspension

provides great comfort of work.

### Double floor conveyor

with an automatic tensioning mechanism is hydraulically driven, what ensures stepless adjustment of the quantity of the spread material.

### Overload clutch

secures the drive unit in case of potential clogs.

### Electronic control (additional equipment)

provides convenient control of the machine from the tractor cabin.

### Hydraulically opened rear flap

closes the load box to prevent the load from falling out during transport.

### Wooden protective extensions

protect the side panels against mechanical damage, during loading.

### Tyres

guarantee low rolling resistance and pressure exerted on the ground, which facilitates operation and movement on wet terrain. Self-cleaning tyres ensure convenient operation of the spreader.

### Mechanical/hydraulic deflectors (additional equipment)

ensure protection of the adapter during transport and adjust spreading width during work.

### Rear flap opening indicator

placed in the front part of the machine, it allows precise opening of the rear flap to the desired height.

### Inspection ladder

allows to look into the load box safely.



DOUBLE FLOOR CONVEYOR

## Light signaling system

warns bystanders of rotating parts when the machine is stopped.

## Road lights

allow the machine to move on public roads.

## Metal fenders

they protect the machine from mud and dirt, and also ensure its cleaner and more efficient work.

## Rotating drive transmission elements

placed in permanent covers, ensure the safety of the machine's use.

## Bracket with wire handles

provides ergonomic arrangement of hydraulic and electrical wiring. Handles and sockets placed on it ensure order and aesthetics after work.

## Optimal placement of elements related to daily operating activities

on one side of the spreader (hydraulic, pneumatic, electric lines, inspection ladder, handbrake) ensures ergonomic use of the machine.

## Wide range of hitch eyes

enable the spreader to be aggregated to a wide range of tractors.

## Docking points for hydraulic, electrical and pneumatic hoses

protecting their connector from contamination, they ensure ergonomic use of the machine.

## Gate and box seals

resistant to dilute acids and alkalis, they ensure a durable design and reliability in operation.

## Pneumatic or hydraulic brakes

allows you to choose the spreader equipment depending on the tractor you have on the farm. At the same time, the innovative design of the spreader makes it possible to install both systems at the same time.



MODEL		RO 1200 TORNADO	RO 1400 TORNADO
Nominal load	t	12	14
Capacity	m <sup>3</sup>	13,5	15,5
Capacity with extensions	m <sup>3</sup>	20,7	22,7
Spreading width	m	5 - 14	5 - 14
Dose of spread material	kg/s	5 - 60	5 - 60
Number of spreading beaters	pcs.	2	2
Suspension		tandem type	tandem type
Number of axles		2	2
Maximum speed	km/h	25	25
Power demand	kW (HP)	80 (108)	100 (136)
Equipment			
wide angle PTO shaft		●	●
electronic control		○	○
electric control of floor conveyor		●	●
rigid drawbar		●	●
sprung drawbar		×	×
1-wire brake system		○	○
2-wire brake system		●	●
hydraulic brakes		○	○
handbrake		●	●
hydraulically opened rear flap		●	●
hydraulic reverse of the floor		●	●
road lights (electric installation)		●	●
inspection ladder		●	●
wooden protective extensions		●	●
deflectors (mechanical / hydraulic)		○	○
tyres		400 / 70 R 22.5	560 / 45 R 22.5
fenders		metal	metal
rear flap opening indicator		●	●
Dimensions			
length	mm	8620	8620
width	mm	2550	2550*
height	mm	2930	2930
loading height	mm	2640	2880
Weight	kg	5850	6380

● – standard, ○ – additional equipment, × – unavailable

\* – depends on the type of tires

SIPMA ZP 4020 ATLAS  
SIPMA ZP 4030 ATLAS  
SIPMA ZP 5520 ATLAS  
SIPMA ZP 5530 ATLAS  
SIPMA ZP 7530 ATLAS

SIPMA ZZ 4020 TYTAN  
SIPMA ZZ 7520 TYTAN  
SIPMA ZZ 7530 TYTAN



SIPMA ZP 7530 ATLAS

SIPMA ZZ 4020 TYTAN

Grain crushers are designed for crushing grains of all types of crops (barley, oat, wheat, rye) and leguminous plants for feed concentrates and such grains as corn, pea, linen.

### Modern technology

of crushed grain fodder processing has numerous advantages over the grinding method and allows obtaining high-quality fodders.

### Crushing process

ensures nutritive absorption at the level of 95% (compared to only 70% of ground fodder) and significantly reduces the electrical power demand in comparison to grinding. The use of this method ensures obtaining low content of dusty fractions.

### Body design

ensures high tightness of the crusher and enables precise assembly of working elements.

### Cast iron or steel crushing rollers with notches

ensure high efficiency as well as durability and reliability of the device.

### Adjustable foot height

(in TYTAN series) allows for easier feeding of the material into the charging hopper or placement of a larger container under the crusher.

### Three crushing rollers system

allows for crushing large grains in one run (corn, field beans, peas, field peas).

### Working port adjustment mechanism

allows for precise adjustment of the working gap and preserves the optimal position of the crushing rollers.

### Magnet cartridge

protects the crusher mechanism from unwanted metal or stones parts.

### Possibility to attach a bagging machine (additional equipment in ATLAS series) and a loading chute.

### Grain dosing adjustment

allows for adjusting the amount of charged grain to the working gap size.

TWO WAYS OF TRANSMITTING DRIVE BETWEEN WORK ROLLS



V-BELTS (ATLAS SERIES)



GEARS (TYTAN SERIES)

MODEL		ZP 4020 ATLAS	ZP 4030 ATLAS	ZP 5520 ATLAS
Engine power	kW	4	4	5.5
Number of rollers	pcs.	2	3	2
Width of roller	mm	160	160	200
Diameter of roller	mm	290	290	290
Working port	mm	0.1 - 0.5	0.1 - 0.5	0.1 - 0.5
Initial crushing port	mm	×	3 - 4	×
Equipment				
legs (750 mm)		●	●	●
adjustable legs (680 - 950 mm)		×	×	×
adjustable legs (700 - 950 mm)		×	×	×
adjustable legs (750 - 950 mm)		×	×	×
bag mounting		○	○	○
Dimensions				
length	mm	1240	1240	1200
width	mm	640	620	710
height	mm	2000	2000	1800
Weight	kg	250	270	355

● – standard, ○ – additional equipment, × – unavailable

ZP 5530 ATLAS	ZP 7530 ATLAS	ZZ 4020 TYTAN	ZZ 7520 TYTAN	ZZ 7530 TYTAN
5.5	7.5	4	7.5	7.5
3	3	2	2	3
200	300	150	300	300
290	290	240	240	240
0.1 - 0.5	0.1 - 0.5	0.1 - 0.5	0.1 - 0.5	0.1 - 0.5
3 - 4	3 - 4	×	×	4
Equipment				
●	●	×	×	×
×	×	●	×	×
×	×	×	●	×
×	×	×	×	●
○	○	●	●	●
Dimensions				
1200	1200	1350	1350	1520
710	780	850	870	910
1800	1800	1380	1420	1580
375	485	196	305	350



GRAIN BEFORE CRUSHING



GRAIN AFTER THE USE OF SIPMA GRAIN CRUSHER



## TRAILED FORAGE HARVESTER FOR ENERGY CROPS

SIPMA SR 1010 HEROS



SIPMA SR 1010 HEROS trailed forage harvester is designed for single phase harvesting of energy crops, mainly energy willow.

### Cutting unit

equipped with hydraulic drive of saws allows to reach high rotational speed of cutting blades, which improves cutting down the sprouts of energy crops, leaving the optimum rootstock for regrowth of plants. The arm bending the plants is adjustable from the tractor cabin and it enables proper orientation the shoots with different heights into the pull-in unit.

### Compressing and pull-in unit

consists of 5 ribbed rollers. It enables to correctly place and feed the chopping rotor chamber with shoots of energy crops. Mechanical pressure and variable clearance between the rollers ensures optimum compression of cut shoots and reliable transportation of crops. Power take-off shafts that drive the pull-in rollers are equipped with safety couplings, which reduce excessive load on the machine. As the direction of rotation of pull-in rollers can be changed from the operator cab, any clogging can be removed from the machine without leaving the tractor.

### Chopping rotor

which at the same time acts as a flywheel, is equipped with cutting blades. At the rim of the rotor there are blades mounted, which provide quick and effective feed of shredded material onto means of transport.

### Built-in blade sharpening system

allows for easy-to-use and accurate sharpening of blades, providing even edges. During grinding, the rotor revolves with low speed and grinding wheel easily sharpens the blades, which quickly become sharp again.

### Power transmission system

with a belt gearing enables adjustment of length of the cut shoots of energy crops ranging from 20 to 55 mm and reduces the risk of damage to the machine during the momentary overloads. The entire power transmission system of the forage harvester is protected against overload with friction coupling mounted on the main power take-off shaft.

### Hydraulically controlled suspension

allows you to adjust the height of crop cutting to the field conditions and provides proper clearance during transportation.

### Discharge chute

enables effective feeding of shredded material onto means of transport with the ability to set the direction and distance of crop chips discharge.

### Hydraulically adjustable drawbar

allows for correct setting of the machine and tractor in interrows, reducing the risk of damage to the rootstock and machine wheels to the minimum.

### Hydraulic folding mechanism of the discharge chute

allows quick and convenient preparation of the machine for transport on public roads.

### Hydraulic system

with electro-hydraulic block that operates all working items of the machine, consistent and optimum machine functions are provided, including smooth acceleration and stopping of the cutting unit.

### Electronic control

allows to adjust the functions of the machine from the operator's seat, without leaving the tractor.



ELECTRONIC CONTROLLER



### Functions of the electronic controller:

- activating the cutting unit;
- activating the reverse of the pull-in and compression unit;
- adjustment of the bending arm height;
- control of the discharge chute;
- adjustment of cutting height;
- drawbar control.

### Additional equipment:

- extension of the discharge chute - allows to deliver the shredded material for greater distances;
- elevation of the discharge chute - allows to load the shredded material on higher means of transport;
- rear hitch - allows you to couple the trailer to the harvester in order to load the shredded material when it is not possible to for the means of transport to go past the harvester.

HYDRAULIC SYSTEM



CHOPPING ROTOR



MODEL		SR 1010 HEROS
Number of rows / row spacing	pcs./m	1 / 0.75
Bulk discharge capacity	t/h	15
Number of cutting blades	pcs.	2
Diameter of cutting blades	mm	450
Cutting height	mm	50 - 120
Maximum diameter of cut shoots	mm	70
Height of cut shoots	mm	9000
Chopping unit		disc and axe
Number of blades	pcs.	4
Cutting length	mm	20 - 55
Max. height of discharge	m	5
Max. distance of discharge	m	10
Control system		electronic
Wheel size		10.0 / 75 - 15.3 10 PR
PTO rotation speed	rpm	540
Maximum working speed	km/h	8
Maximum transport speed	km/h	25
Power demand	kW (HP)	80 (108.8)
Equipment		
wide angle PTO shaft with friction clutch		●
extension of the discharge chute		○
elevation of the discharge chute		○
rear hitch		○
Dimensions		
length	mm	5000
width	mm	2650
height	mm	2350
loading height	mm	3880
Weight	kg	1500

● - standard, ○ - additional equipment, × - unavailable

## PTO SHAFTS

### BASIC PTO SHAFT

SIPMA WPT 220  
SIPMA WPT 300  
SIPMA WPT 460  
SIPMA WPT 540  
SIPMA WPT 630  
SIPMA WPT 680  
SIPMA WPT 900  
SIPMA WPT 1200  
SIPMA WPT 1700

### WIDE ANGLE PTO SHAFT

SIPMA WPTS 300  
SIPMA WPTS 680  
SIPMA WPTS 900  
SIPMA WPTS 1200



BASIC PTO SHAFTS

### SIPMA PTO shafts

SIPMA PTO shafts are designed to transmit a specific torque from the Power-Take-Off spline shaft of the tractor to the Power-Take-On spline shaft of the machine. SIPMA makes PTO shafts designed to transmit the torque of the following ranges: 220 Nm, 300 Nm, 460 Nm, 540 Nm, 630 Nm, 680 Nm, 900 Nm, 1200 Nm, 1700 Nm in the basic version and 300 Nm, 680 Nm, 900 Nm, 1200 Nm in wide angle version.

Wide angle PTO shafts come in two versions:

- with one wide angle joint;
- with two wide angle joints.

### Basic PTO shafts

Basic PTO shafts are used when the mutual location of the Power-Take-Off and Power-Take-On spline shafts during continuous works does not result in exceeded 25° of joint breaking angle.

### Wide angle PTO shafts

Wide angle PTO shafts are used in the case where the fracture of relative position of the tractor power take off to the machine power input connection shaft can allow reaching up to 50° angles in every working moment and 80° angles temporary. These shafts make it possible continuous power transmission without necessity disengaging the drive on headlands.



WIDE ANGLE PTO SHAFT

## Safety clutches

Basic and wide angle PTO shafts, depending on needs, may be equipped in the following safety clutches:

- overload clutch (SP);
- overload automatic clutch (SPA, SSPA);
- friction clutch (SC);
- friction clutch with a plate spring (SB);
- friction and overrunning clutch (SD);
- one-way friction clutch with a plate spring (ST);
- shear bolt clutch (SK);
- overrunning clutch (SJ).

### Overload clutch (SP)

with scoops operating radially, operates by interrupting the drive transmission when the torque exceeds the clutch setting.

### Overload automatic clutch (SPA, SSPA)

is used to interrupt the power flow when the transmitted torque reaches a preset size. The clutch does not require the immediate shutdown of the drive at the time of the overload occurs.

### Friction clutch (SC)

transmits torque without switching off the drive when the overload reaches the set value. It can be used as a starting or overload clutch for machines with elements having high inertia.

### Friction clutch with a plate spring (SB)

transmits the torque without disengaging the drive when the overload reaches the set value. It is used as a starting or overload clutch for driving machines with elements with high moment of inertia.

### Friction and overrunning clutch (SD)

allows for the torque transmission without switching of the drive, even under overload conditions exceeding the maximum clutch setting. At the same time, it allows the torque transmission in one direction only. It can be used for machines with elements having high inertia.

### One-way friction clutch with a plate spring (ST)

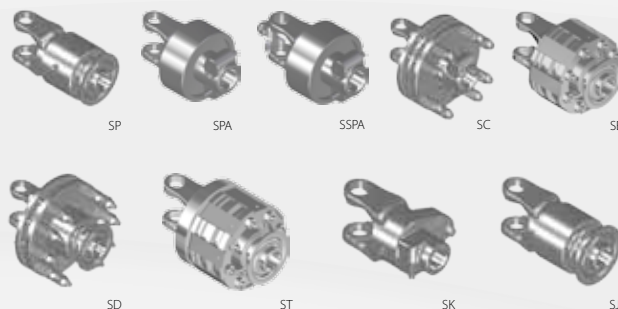
allows the transmission of torque without shutting down the drive, even when the overload reaches the size of the clutch setting. At the same time, the one-way friction clutch allows the torque to be transferred only in one direction. It can be used in machines with elements with a high moment of inertia. The clutch can be available right or left.

### Shear bolt clutch (SK)

protects the driveline against blockage and disconnects the torque transmission from the tractor when the torque exceeds the clutch setting which breaks the bolt.

### Overrunning clutch (SJ)

transmits the torque in one direction only and is used in PTO shafts which drive machines with elements having high inertia (e.g. disc mowers).



MODEL		WPT 220	WPT 300	WPTS 300	WPT 460	WPT 540
Strength parameters - 540 rpm						
power	kW (HP)	12 (17)	17 (23)	17 (23)	26 (35)	31 (42)
torque	Nm	220	300	300	460	540
Strength parameters - 1000 rpm						
power	kW (HP)	19 (26)	26 (36)	26 (36)	40 (55)	47 (64)
torque	Nm	183	250	250	383	450
Max. dynamic torque	Nm	330	450	450	690	810

WPT 630	WPT 680	WPTS 680	WPT 900	WPTS 900	WPT 1200	WPTS 1200	WPT 1700
36 (48)	38 (52)	38 (52)	51 (69)	51 (69)	68 (92)	68 (92)	96 (131)
630	680	680	900	900	1200	1200	1700
55 (75)	59 (81)	59 (81)	79 (107)	79 (107)	105 (142)	105 (142)	146 (199)
525	567	567	750	750	1000	1000	1400
945	1020	1020	1350	1350	1800	1800	2550

# SIPMA

## ORIGINAL SPARE PARTS



**Quality is our goal** and as the first company in the farming machinery industry we have introduced the uniform method of packing our spare parts with SKIN-PAK. This system protects the parts from damage and corrosion, it also guarantees quality and origin.

**Reliability** is a feature characteristic for original spare parts for SIPMA products.

**Long life and work safety** of the machines even after many years of operation is guaranteed only by original spare parts.

**Easy access** to original spare parts is ensured by our wide sales network. Spare parts can be purchased in our retail outlets in Lublin and Zamość, as well as at our Authorised Dealers or on mail order.

### SIPMA online shop

We also invite You to make purchases via internet. Online shopping are convenient way of ordering products and spare parts.

Visit: [www.sklep.sipma.pl](http://www.sklep.sipma.pl)



GRUPA  
SIPMA

[www.grupasipma.pl](http://www.grupasipma.pl)

The SIPMA GROUP was established in 1996 on the initiative of SIPMA S.A. The SIPMA GROUP associates carefully selected companies which cooperate in the market of agricultural machines. Currently the following business entities are included in the SIPMA GROUP:

**SIPMA**  
[www.sipma.pl](http://www.sipma.pl)

Dominant entity of SIPMA GROUP which produces agricultural machines.

**R&D Centre  
INVENTOR**  
[www.rndcentreinventor.pl](http://www.rndcentreinventor.pl)

Research and Development Centre which comprehensively fulfils technical projects, prototypes production and testing in the range of agricultural and communal machines as well as other designs in the field of mechanics.

**SIPMOT**  
[www.sipmot.pl](http://www.sipmot.pl)

Manufacturer of agricultural machines, using documentation and know-how of SIPMA S.A.

**transip**  
[www.transip.pl](http://www.transip.pl)

The company offering transport services as well as maintenance and repair service of trucks, tractors and fork-lift trucks.

**SIPMA**  
[www.sipma.ru](http://www.sipma.ru)

General distributor at the territory of the Russian Federation.

Dotted lines for writing notes on the left page.

Dotted lines for writing notes on the right page.



**SIPMA S.A.**

ul. Budowlana 26  
20-469 Lublin, Poland  
tel. (+48) 81 44 14 400  
[www.sipma.pl](http://www.sipma.pl)

Stamp of SIPMA Authorized Dealer

---

Detailed information about products can be obtained from SIPMA S.A. traders and our Authorized Dealers. Please contact us.

This publication does not constitute an offer within the meaning of the Civil Code and is published for information purposes.

The producer reserves the right to introduce changes.



If you are not interested in the brochure, do not throw it away - give to somebody who will be potentially interested. Thanks to that, You preserve natural environment.